The number of groups for POWER5 is 140 for AIX 5.2 and 148 for Linux and AIX 5.3. The reason for this difference is the different versions of bos.pmapi. The last group (139) was changed and eight new groups were appended.

Table 6-3 contains a list of the event names and groups on the Blue Gene/P system.

Table 6-3 Event names

Group	Counter	Event name	Event description
0	0	BGP_PU0_JPIPE_INSTRUCTIONS	PU0: Number of J-pipe instructions
0	1	BGP_PU0_JPIPE_ADD_SUB	PU0: PowerPC Add/Sub in J-pipe
0	2	BGP_PU0_JPIPE_LOGICAL_OPS	PU0: PowerPC logical operations in J-pipe
0	3	BGP_PU0_JPIPE_SHROTMK	PU0: Shift, rotate, mask instructions
0	4	BGP_PU0_IPIPE_INSTRUCTIONS	PU0: Number of I-pipe instructions
0	5	BGP_PU0_IPIPE_MULT_DIV	PU0: PowerPC Mul/Div in I-pipe
0	6	BGP_PU0_IPIPE_ADD_SUB	PU0: PowerPC Add/Sub in I-pipe
0	7	BGP_PU0_IPIPE_LOGICAL_OPS	PU0: PowerPC logical operations in I-pipe
0	8	BGP_PU0_IPIPE_SHROTMK	PU0: Shift, rotate, mask instructions
0	9	BGP_PU0_IPIPE_BRANCHES	PU0: PowerPC branches
0	10	BGP_PU0_IPIPE_TLB_OPS	PU0: PowerPC TLB operations
0	11	BGP_PU0_IPIPE_PROCESS_CONTROL	PU0: PowerPC process control
0	12	BGP_PU0_IPIPE_OTHER	PU0: PowerPC other I-pipe operations
0	13	BGP_PU0_DCACHE_LINEFILLINPROG	PU0: Number of cycles D-cache LineFillInProgress
0	14	BGP_PU0_ICACHE_LINEFILLINPROG	PU0: Number of cycles I-cache LineFillInProgress
0	15	BGP_PU0_DCACHE_MISS	PU0: Accesses to D cache that miss in D Cache
0	16	BGP_PU0_DCACHE_HIT	PU0: Accesses to D cache that hit in D Cache
0	17	BGP_PU0_DATA_LOADS	PU0: PowerPC data loads
0	18	BGP_PU0_DATA_STORES	PU0: PowerPC data stores
0	19	BGP_PU0_DCACHE_OPS	PU0: D cache operations
0	20	BGP_PU0_ICACHE_MISS	PU0: Accesses to I cache that miss in I Cache
0	21	BGP_PU0_ICACHE_HIT	PU0: Accesses to I cache that hit in I Cache
0	22	BGP_PU0_FPU_ADD_SUB_1	PU0: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
0	23	BGP_PU0_FPU_MULT_1	PU0: PowerPC FP Mult (fmul, fmuls)

Group	Counter	Event name	Event description
0	24	BGP_PU0_FPU_FMA_2	PU0: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
0	25	BGP_PU0_FPU_DIV_1	PU0: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
0	26	BGP_PU0_FPU_OTHER_NON_STORAGE_OPS	PU0: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
0	27	BGP_PU0_FPU_ADD_SUB_2	PU0: Dual pipe Add/Sub (fpadd, fpsub)
0	28	BGP_PU0_FPU_MULT_2	PU0: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
0	29	BGP_PU0_FPU_FMA_4	PU0: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results are generated per instruction, four flops)
0	30	BGP_PU0_FPU_DUAL_PIPE_OTHER_NON_STORAGE_OPS	PU0: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
0	31	BGP_PU0_FPU_QUADWORD_LOADS	PU0: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
0	32	BGP_PU0_FPU_OTHER_LOADS	PU0: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
0	33	BGP_PU0_FPU_QUADWORD_STORES	PU0: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
0	34	BGP_PU0_FPU_OTHER_STORES	PU0: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
0	35	BGP_PU1_JPIPE_INSTRUCTIONS	PU1: Number of J-pipe instructions
0	36	BGP_PU1_JPIPE_ADD_SUB	PU1: PowerPC Add/Sub in J-pipe
0	37	BGP_PU1_JPIPE_LOGICAL_OPS	PU1: PowerPC logical operations in J-pipe
0	38	BGP_PU1_JPIPE_SHROTMK	PU1: Shift, rotate, mask instructions
0	39	BGP_PU1_IPIPE_INSTRUCTIONS	PU1: Number of I-pipe instructions
0	40	BGP_PU1_IPIPE_MULT_DIV	PU1: PowerPC Mul/Div in I-pipe

Group	Counter	Event name	Event description
0	41	BGP_PU1_IPIPE_ADD_SUB	PU1: PowerPC Add/Sub in I-pipe
0	42	BGP_PU1_IPIPE_LOGICAL_OPS	PU1: PowerPC logical operations in I-pipe
0	43	BGP_PU1_IPIPE_SHROTMK	PU1: Shift, rotate, mask instructions
0	44	BGP_PU1_IPIPE_BRANCHES	PU1: PowerPC branches
0	45	BGP_PU1_IPIPE_TLB_OPS	PU1: PowerPC TLB operations
0	46	BGP_PU1_IPIPE_PROCESS_CONTROL	PU1: PowerPC process control
0	47	BGP_PU1_IPIPE_OTHER	PU1: PowerPC other I-pipe operations
0	48	BGP_PU1_DCACHE_LINEFILLINPROG	PU1: Number of cycles D-cache LineFillInProgress
0	49	BGP_PU1_ICACHE_LINEFILLINPROG	PU1: Number of cycles I-cache LineFillInProgress
0	50	BGP_PU1_DCACHE_MISS	PU1: Accesses to D cache that miss in D Cache
0	51	BGP_PU1_DCACHE_HIT	PU1: Accesses to D cache that hit in D Cache
0	52	BGP_PU1_DATA_LOADS	PU1: PowerPC data loads
0	53	BGP_PU1_DATA_STORES	PU1: PowerPC data stores
0	54	BGP_PU1_DCACHE_OPS	PU1: D cache operations
0	55	BGP_PU1_ICACHE_MISS	PU1: Accesses to I cache that miss in I Cache
0	56	BGP_PU1_ICACHE_HIT	PU1: Accesses to I cache that hit in I Cache
0	57	BGP_PU1_FPU_ADD_SUB_1	PU1: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
0	58	BGP_PU1_FPU_MULT_1	PU1: PowerPC FP Mult (fmul, fmuls)
0	59	BGP_PU1_FPU_FMA_2	PU1: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
0	60	BGP_PU1_FPU_DIV_1	PU1: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
0	61	BGP_PU1_FPU_OTHER_NON_STORAGE_OPS	PU1: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
0	62	BGP_PU1_FPU_ADD_SUB_2	PU1: Dual pipe Add/Sub (fpadd, fpsub)
0	63	BGP_PU1_FPU_MULT_2	PU1: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)

Group	Counter	Event name	Event description
0	64	BGP_PU1_FPU_FMA_4	PU1: Dual pipe FMA's (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
0	65	BGP_PU1_FPU_DUAL_PIPE_OTHER_NON_STORAGE_OPS	PU1: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
0	66	BGP_PU1_FPU_QUADWORD_LOADS	PU1: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
0	67	BGP_PU1_FPU_OTHER_LOADS	PU1: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
0	68	BGP_PU1_FPU_QUADWORD_STORES	PU1: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
0	69	BGP_PU1_FPU_OTHER_STORES	PU1: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
0	70	BGP_PU0_L1_INVALIDATION_REQUESTS	PU0 L1: Invalidation requested
0	71	BGP_PU1_L1_INVALIDATION_REQUESTS	PU1 L1: Invalidation requested
0	72	BGP_PU0_L2_VALID_PREFETCH_REQUESTS	PU0 L2: Prefetch request valid
0	73	BGP_PU0_L2_PREFETCH_HITS_IN_FILTER	PU0 L2: Prefetch hits in filter
0	74	BGP_PU0_L2_PREFETCH_HITS_IN_STREAM	PU0 L2: Prefetch hits in active stream
0	75	BGP_PU0_L2_CYCLES_PREFETCH_PENDING	PU0 L2: Number of cycles for which L2-prefetch is pending
0	76	BGP_PU0_L2_PAGE_ALREADY_IN_L2	PU0 L2: requested PF is already in L2
0	77	BGP_PU0_L2_PREFETCH_SNOOP_HIT_SAME_CORE	PU0 L2: Prefetch snoop hit from the same core (write)
0	78	BGP_PU0_L2_PREFETCH_SNOOP_HIT_OTHER_CORE	PU0 L2: Prefetch snoop hit from the other core
0	79	BGP_PU0_L2_PREFETCH_SNOOP_HIT_PLB	PU0 L2: Prefetch snoop hit PLB (write)
0	80	BGP_PU0_L2_CYCLES_READ_REQUEST_PENDING	PU0 L2: Number of cycles for which a read request is pending
0	81	BGP_PU0_L2_READ_REQUESTS	PU0 L2: Read requests
0	82	BGP_PU0_L2_DEVBUS_READ_REQUESTS	PU0 L2: Devbus read requests (for SRAM, LOCK and UPC)
0	83	BGP_PU0_L2_L3_READ_REQUESTS	PU0 L2: L3 read request

Group	Counter	Event name	Event description
0	84	BGP_PU0_L2_NETBUS_READ_REQUESTS	PU0 L2: Netbus read requests (for tree and torus)
0	85	BGP_PU0_L2_BLIND_DEV_READ_REQUESTS	PU0 L2: BLIND device read request
0	86	BGP_PU0_L2_PREFETCHABLE_REQUESTS	PU0 L2: Prefetchable requests
0	87	BGP_PU0_L2_HIT	PU0 L2: L2 hit
0	88	BGP_PU0_L2_SAME_CORE_SNOOPS	PU0 L2: Same core snoops
0	89	BGP_PU0_L2_OTHER_CORE_SNOOPS	PU0 L2: Other core snops
0	90	BGP_PU0_L2_OTHER_DP_PU0_SNOOPS	PU0 L2: Other DP PU0 snoops
0	91	BGP_PU0_L2_OTHER_DP_PU1_SNOOPS	PU0 L2: Other DP PU1 snoops
0	92	BGP_PU0_L2_RESERVED_1	PU0 L2: Reserved
0	93	BGP_PU0_L2_RESERVED_2	PU0 L2: Reserved
0	94	BGP_PU0_L2_RESERVED_3	PU0 L2: Reserved
0	95	BGP_PU0_L2_RESERVED_4	PU0 L2: Reserved
0	96	BGP_PU0_L2_RESERVED_5	PU0 L2: Reserved
0	97	BGP_PU0_L2_RESERVED_6	PU0 L2: Reserved
0	98	BGP_PU0_L2_RESERVED_7	PU0 L2: Reserved
0	99	BGP_PU0_L2_RESERVED_8	PU0 L2: Reserved
0	100	BGP_PU0_L2_RESERVED_9	PU0 L2: Reserved
0	101	BGP_PU0_L2_RESERVED_10	PU0 L2: Number of writes to L3
0	102	BGP_PU0_L2_RESERVED_11	PU0 L2: Number of writes to network
0	103	BGP_PU0_L2_RESERVED_12	PU0 L2: Number of writes to devbus
0	104	BGP_PU1_L2_VALID_PREFETCH_REQUESTS	PU1 L2: Prefetch request valid
0	105	BGP_PU1_L2_PREFETCH_HITS_IN_FILTER	PU1 L2: Prefetch hits in filter
0	106	BGP_PU1_L2_PREFETCH_HITS_IN_STREAM	PU1 L2: Prefetch hits in active stream
0	107	BGP_PU1_L2_CYCLES_PREFETCH_PENDING	PU1 L2: Number of cycles for which L2-prefetch is pending
0	108	BGP_PU1_L2_PAGE_ALREADY_IN_L2	PU1 L2: requested PF is already in L2
0	109	BGP_PU1_L2_PREFETCH_SNOOP_HIT_SAME_CORE	PU1 L2: Prefetch snoop hit from the same core (write)
0	110	BGP_PU1_L2_PREFETCH_SNOOP_HIT_OTHER_CORE	PU1 L2: Prefetch snoop hit from the other core
0	111	BGP_PU1_L2_PREFETCH_SNOOP_HIT_PLB	PU1 L2: Prefetch snoop hit PLB (write)
0	112	BGP_PU1_L2_CYCLES_READ_REQUEST_PENDING	PU1 L2: Number of cycles for which a read request is pending
0	113	BGP_PU1_L2_READ_REQUESTS	PU1 L2: Read requests

Group	Counter	Event name	Event description
0	114	BGP_PU1_L2_DEVBUS_READ_REQUESTS	PU1 L2: Devbus read requests (for SRAM, LOCK and UPC)
0	115	BGP_PU1_L2_L3_READ_REQUESTS	PU1 L2: L3 read request
0	116	BGP_PU1_L2_NETBUS_READ_REQUESTS	PU1 L2: Netbus read requests (for tree and torus)
0	117	BGP_PU1_L2_BLIND_DEV_READ_REQUESTS	PU1 L2: BLIND device read request
0	118	BGP_PU1_L2_PREFETCHABLE_REQUESTS	PU1 L2: Prefetchable requests
0	119	BGP_PU1_L2_HIT	PU1 L2: L2 hit
0	120	BGP_PU1_L2_SAME_CORE_SNOOPS	PU1 L2: Same core snoops
0	121	BGP_PU1_L2_OTHER_CORE_SNOOPS	PU1 L2: Other core snops
0	122	BGP_PU1_L2_OTHER_DP_PU0_SNOOPS	PU1 L2: Other DP PU0 snoops
0	123	BGP_PU1_L2_OTHER_DP_PU1_SNOOPS	PU1 L2: Other DP PU1 snoops
0	124	BGP_PU1_L2_RESERVED_1	PU1 L2: Reserved
0	125	BGP_PU1_L2_RESERVED_2	PU1 L2: Reserved
0	126	BGP_PU1_L2_RESERVED_3	PU1 L2: Reserved
0	127	BGP_PU1_L2_RESERVED_4	PU1 L2: Reserved
0	128	BGP_PU1_L2_RESERVED_5	PU1 L2: Reserved
0	129	BGP_PU1_L2_RESERVED_6	PU1 L2: Reserved
0	130	BGP_PU1_L2_RESERVED_7	PU1 L2: Reserved
0	131	BGP_PU1_L2_RESERVED_8	PU1 L2: Reserved
0	132	BGP_PU1_L2_RESERVED_9	PU1 L2: Reserved
0	133	BGP_PU1_L2_RESERVED_10	PU1 L2: Number of writes to L3
0	134	BGP_PU1_L2_RESERVED_11	PU1 L2: Number of writes to network
0	135	BGP_PU1_L2_RESERVED_12	PU1 L2: Number of writes to devbus
0	136	BGP_L3_M0_RD0_SINGLE_LINE_DELIVERED_L2	L3 M0: Rd 0: Single line delivered to L2
0	137	BGP_L3_M0_RD0_BURST_DELIVERED_L2	L3 M0: Rd 0: Burst delivered to L2
0	138	BGP_L3_M0_RD0_READ_RETURN_COLLISION	L3 M0: Rd 0: Read return collision
0	139	BGP_L3_M0_RD0_DIR0_HIT_OR_INFLIGHT	L3 M0: Rd 0: dir0 hit or in flight
0	140	BGP_L3_M0_RD0_DIR0_MISS_OR_LOCKDOWN	L3 M0: Rd 0: dir0 miss or lock-down
0	141	BGP_L3_M0_RD0_DIR1_HIT_OR_INFLIGHT	L3 M0: Rd 0: dir1 hit or in flight
0	142	BGP_L3_M0_RD0_DIR1_MISS_OR_LOCKDOWN	L3 M0: Rd 0: dir1 miss or lock-down
0	143	BGP_L3_M0_RD1_SINGLE_LINE_DELIVERED_L2	L3 M0: Rd 1: Single line delivered to L2
0	144	BGP_L3_M0_RD1_BURST_DELIVERED_L2	L3 M0: Rd 1: Burst delivered to L2
0	145	BGP_L3_M0_RD1_READ_RETURN_COLLISION	L3 M0: Rd 1: Read return collision

Group	Counter	Event name	Event description
0	146	BGP_L3_M0_RD1_DIR0_HIT_OR_INFLIGHT	L3 M0: Rd 1: dir0 hit or in flight
0	147	BGP_L3_M0_RD1_DIR0_MISS_OR_LOCKDOWN	L3 M0: Rd 1: dir0 miss or lock-down
0	148	BGP_L3_M0_RD1_DIR1_HIT_OR_INFLIGHT	L3 M0: Rd 1: dir1 hit or in flight
0	149	BGP_L3_M0_RD1_DIR1_MISS_OR_LOCKDOWN	L3 M0: Rd 1: dir1 miss or lock-down
0	150	BGP_L3_M0_DIR0_LOOKUPS	L3 M0: Dir 0: Number of lookups
0	151	BGP_L3_M0_DIR0_CYCLES_REQUESTS_NOT_ TAKEN	L3 M0: Dir 0: Number of cycles with requests that are not taken
0	152	BGP_L3_M0_DIR1_LOOKUPS	L3 M0: Dir 1: Number of lookups
0	153	BGP_L3_M0_DIR1_CYCLES_REQUESTS_NOT_ TAKEN	L3 M0: Dir 1: Number of cycles with requests that are not taken
0	154	BGP_L3_M0_MH_DDR_STORES	L3 M0: M0-18/MH: Number of stores to DDR
0	155	BGP_L3_M0_MH_DDR_FETCHES	L3 M0: M0-19/MH: Number of fetches from DDR
0	156	BGP_L3_M1_RD0_SINGLE_LINE_DELIVERED_L2	L3 M1: Rd 0: Single line delivered to L2
0	157	BGP_L3_M1_RD0_BURST_DELIVERED_L2	L3 M1: Rd 0: Burst delivered to L2
0	158	BGP_L3_M1_RD0_READ_RETURN_COLLISION	L3 M1: Rd 0: Read return collision
0	159	BGP_L3_M1_RD0_DIR0_HIT_OR_INFLIGHT	L3 M1: Rd 0: dir0 hit or in flight
0	160	BGP_L3_M1_RD0_DIR0_MISS_OR_LOCKDOWN	L3 M1: Rd 0: dir0 miss or lock-down
0	161	BGP_L3_M1_RD0_DIR1_HIT_OR_INFLIGHT	L3 M1: Rd 0: dir1 hit or in flight
0	162	BGP_L3_M1_RD0_DIR1_MISS_OR_LOCKDOWN	L3 M1: Rd 0: dir1 miss or lock-down
0	163	BGP_L3_M1_RD1_SINGLE_LINE_DELIVERED_L2	L3 M1: Rd 1: Single line delivered to L2
0	164	BGP_L3_M1_RD1_BURST_DELIVERED_L2	L3 M1: Rd 1: Burst delivered to L2
0	165	BGP_L3_M1_RD1_READ_RETURN_COLLISION	L3 M1: Rd 1: Read return collision
0	166	BGP_L3_M1_RD1_DIR0_HIT_OR_INFLIGHT	L3 M1: Rd 1: dir0 hit or in flight
0	167	BGP_L3_M1_RD1_DIR0_MISS_OR_LOCKDOWN	L3 M1: Rd 1: dir0 miss or lock-down
0	168	BGP_L3_M1_RD1_DIR1_HIT_OR_INFLIGHT	L3 M1: Rd 1: dir1 hit or in flight
0	169	BGP_L3_M1_RD1_DIR1_MISS_OR_LOCKDOWN	L3 M1: Rd 1: dir1 miss or lock-down
0	170	BGP_L3_M1_DIR0_LOOKUPS	L3 M1: Dir 0: Number of lookups
0	171	BGP_L3_M1_DIR0_CYCLES_REQUESTS_ NOT_TAKEN	L3 M1: Dir 0: Number of cycles with requests that are not taken
0	172	BGP_L3_M1_DIR1_LOOKUPS	L3 M1: Dir 1: Number of lookups
0	173	BGP_L3_M1_DIR1_CYCLES_REQUESTS_ NOT_TAKEN	L3 M1: Dir 1: Number of cycles with requests that are not taken
0	174	BGP_L3_M1_MH_DDR_STORES	L3 M1: M0-18/MH: Number of stores to DDR

Group	Counter	Event name	Event description
0	175	BGP_L3_M1_MH_DDR_FETCHES	L3 M1: M0-19/MH: Number of fetches from DDR
0	176	BGP_PU0_SNOOP_PORT0_REMOTE_SOURCE_ REQUESTS	PU0 snoop: Port 0 received a snoop request from a remote source
0	177	BGP_PU0_SNOOP_PORT1_REMOTE_SOURCE_ REQUESTS	PU0 snoop: Port 1 received a snoop request from a remote source
0	178	BGP_PU0_SNOOP_PORT2_REMOTE_SOURCE_ REQUESTS	PU0 snoop: Port 2 received a snoop request from a remote source
0	179	BGP_PU0_SNOOP_PORT3_REMOTE_SOURCE_ REQUESTS	PU0 snoop: Port 3 received a snoop request from a remote source
0	180	BGP_PU0_SNOOP_PORT0_REJECTED_ REQUESTS	PU0 snoop: Port 0 snoop filter rejected a snoop request
0	181	BGP_PU0_SNOOP_PORT1_REJECTED_ REQUESTS	PU0 snoop: Port 1 snoop filter rejected a snoop request
0	182	BGP_PU0_SNOOP_PORT2_REJECTED_ REQUESTS	PU0 snoop: Port 2 snoop filter rejected a snoop request
0	183	BGP_PU0_SNOOP_PORT3_REJECTED_ REQUESTS	PU0 snoop: Port 3 snoop filter rejected a snoop request
0	184	BGP_PU0_SNOOP_L1_CACHE_WRAP	PU0 snoop: Snoop filter detected an L1 cache wrap
0	185	BGP_PU1_SNOOP_PORT0_REMOTE_SOURCE_ REQUESTS	PU1 snoop: Port 0 received a snoop request from a remote source
0	186	BGP_PU1_SNOOP_PORT1_REMOTE_SOURCE_ REQUESTS	PU1 snoop: Port 1 received a snoop request from a remote source
0	187	BGP_PU1_SNOOP_PORT2_REMOTE_SOURCE_ REQUESTS	PU1 snoop: Port 2 received a snoop request from a remote source
0	188	BGP_PU1_SNOOP_PORT3_REMOTE_SOURCE_ REQUESTS	PU1 snoop: Port 3 received a snoop request from a remote source
0	189	BGP_PU1_SNOOP_PORT0_REJECTED_ REQUESTS	PU1 snoop: Port 0 snoop filter rejected a snoop request
0	190	BGP_PU1_SNOOP_PORT1_REJECTED_ REQUESTS	PU1 snoop: Port 1 snoop filter rejected a snoop request
0	191	BGP_PU1_SNOOP_PORT2_REJECTED_ REQUESTS	PU1 snoop: Port 2 snoop filter rejected a snoop request
0	192	BGP_PU1_SNOOP_PORT3_REJECTED_ REQUESTS	PU1 snoop: Port 3 snoop filter rejected a snoop request
0	193	BGP_PU1_SNOOP_L1_CACHE_WRAP	PU1 snoop: Snoop filter detected an L1 cache wrap
0	194	BGP_TORUS_XP_PACKETS	Torus: Number of packets sent to X+ dimension
0	195	BGP_TORUS_XP_32BCHUNKS	Torus: Number of 32B chunks sent to X+

Group	Counter	Event name	Event description
0	196	BGP_TORUS_XM_PACKETS	Torus: Number of packets sent to X-dimension
0	197	BGP_TORUS_XM_32BCHUNKS	Torus: Number of 32B chunks sent to X-
0	198	BGP_TORUS_YP_PACKETS	Torus: Number of packets sent to Y+ dimension
0	199	BGP_TORUS_YP_32BCHUNKS	Torus: Number of 32B chunks sent to Y+
0	200	BGP_TORUS_YM_PACKETS	Torus: Number of packets sent to Y-dimension
0	201	BGP_TORUS_YM_32BCHUNKS	Torus: Number of 32B chunks sent to Y-
0	202	BGP_TORUS_ZP_PACKETS	Torus: Number of packets sent to Z+ dimension
0	203	BGP_TORUS_ZP_32BCHUNKS	Torus: Number of 32B chunks sent to Z+
0	204	BGP_TORUS_ZM_PACKETS	Torus: Number of packets sent to Z-dimension
0	205	BGP_TORUS_ZM_32BCHUNKS	Torus: Number of 32B chunks sent to Z-
0	206	BGP_DMA_PACKETS_INJECTED	DMA: Number of packets injected
0	207	BGP_DMA_DESCRIPTORS_READ_FROM_L3	DMA: Number of descriptors read from L3
0	208	BGP_DMA_FIFO_PACKETS_RECEIVED	DMA: Number of fifo packets received
0	209	BGP_DMA_COUNTER_PACKETS_RECEIVED	DMA: Number of counter packets received
0	210	BGP_DMA_REMOTE_GET_PACKETS_RECEIVED	DMA: Number of remote get packets received
0	211	BGP_DMA_IDPU_READ_REQUESTS_TO_L3	DMA: Number of read requests to L3 by IDPU
0	212	BGP_DMA_READ_VALID_RETURNED	DMA: Number of read valid returned from L3
0	213	BGP_DMA_ACKED_READ_REQUESTS	DMA: Number of DMA L3 read requests acknowledged by the L3
0	214	BGP_DMA_CYCLES_RDPU_WRITE_ACTIVE	DMA: Number of cycles rdpu wants to write to L3, independent of the write ready
0	215	BGP_DMA_WRITE_REQUESTS_TO_L3	DMA: Number of write requests to L3
0	216	BGP_DMA_RESERVED_1	DMA: Reserved
0	217	BGP_DMA_RESERVED_2	DMA: Reserved
0	218	BGP_DMA_RESERVED_3	DMA: Reserved
0	219	BGP_DMA_RESERVED_4	DMA: Reserved
0	220	BGP_DMA_RESERVED_5	DMA: Reserved
0	221	BGP_DMA_RESERVED_6	DMA: Reserved

Group	Counter	Event name	Event description
0	222	BGP_COL_AC_CH2_VC0_MATURE	Collective: arbiter_core ch2_vc0_mature
0	223	BGP_COL_AC_CH1_VC0_MATURE	Collective: arbiter_core ch1_vc0_mature
0	224	BGP_COL_AC_CH0_VC0_MATURE	Collective: arbiter_core ch0_vc0_mature
0	225	BGP_COL_AC_INJECT_VC0_MATURE	Collective: arbiter_core inj_vc0_mature
0	226	BGP_COL_AC_CH2_VC1_MATURE	Collective: arbiter_core ch2_vc1_mature
0	227	BGP_COL_AC_CH1_VC1_MATURE	Collective: arbiter_core ch1_vc1_mature
0	228	BGP_COL_AC_CH0_VC1_MATURE	Collective: arbiter_core ch0_vc1_mature
0	229	BGP_COL_AC_INJECT_VC1_MATURE	Collective: arbiter_core inj_vc1_mature
0	230	BGP_COL_AC_PENDING_REQUESTS	Collective: arbiter_core requests pending
0	231	BGP_COL_AC_WAITING_REQUESTS	Collective: arbiter_core requests waiting (ready to go)
0	232	BGP_COL_AR2_PACKET_TAKEN	Collective: Arbiter receiver 2 packets taken
0	233	BGP_COL_AR1_PACKET_TAKEN	Collective: Arbiter receiver 1 packets taken
0	234	BGP_COL_AR0_PACKET_TAKEN	Collective: Arbiter receiver 0 packets taken
0	235	BGP_COL_ALC_PACKET_TAKEN	Collective: Arbiter local client packets taken
0	236	BGP_COL_AR0_VC0_DATA_PACKETS_RECEIVED	Collective: Receiver 0 vc0 data packets received
0	237	BGP_COL_AR0_VC1_DATA_PACKETS_RECEIVED	Collective: Receiver 0 vc1 data packets received
0	238	BGP_COL_AR1_VC0_DATA_PACKETS_RECEIVED	Collective: Receiver 1 vc0 data packets received
0	239	BGP_COL_AR1_VC1_DATA_PACKETS_RECEIVED	Collective: Receiver 1 vc1 data packets received
0	240	BGP_COL_AR2_VC0_DATA_PACKETS_RECEIVED	Collective: Receiver 2 vc0 data packets received
0	241	BGP_COL_AR2_VC1_DATA_PACKETS_RECEIVED	Collective: Receiver 2 vc1 data packets received
0	242	BGP_COL_AS0_VC0_DATA_PACKETS_SENT	Collective: Sender 0 vc0 data packets sent
0	243	BGP_COL_AS0_VC1_DATA_PACKETS_SENT	Collective: Sender 0 vc1 data packets sent

Group	Counter	Event name	Event description
0	244	BGP_COL_AS1_VC0_DATA_PACKETS_SENT	Collective: Sender 1 vc0 data packets sent
0	245	BGP_COL_AS1_VC1_DATA_PACKETS_SENT	Collective: Sender 1 vc1 data packets sent
0	246	BGP_COL_AS2_VC0_DATA_PACKETS_SENT	Collective: Sender 2 vc0 data packets sent
0	247	BGP_COL_AS2_VC1_DATA_PACKETS_SENT	Collective: Sender 2 vc1 data packets sent
0	248	BGP_COL_INJECT_VC0_HEADER	Collective: Injection vc0 header
0	249	BGP_COL_INJECT_VC1_HEADER	Collective: Injection vc1 header added
0	250	BGP_COL_RECEPTION_VC0_PACKET_ADDED	Collective: Reception vc0 packet added
0	251	BGP_COL_RECEPTION_VC1_PACKET_ADDED	Collective: Reception vc1 packet added
0	252	BGP_IC_TIMESTAMP	IC: Timestamp
0	253	BGP_MISC_RESERVED_1	Misc: Reserved
0	254	BGP_MISC_RESERVED_2	Misc: Reserved
0	255	BGP_MISC_ELAPSED_TIME	Misc: Elapsed time
1	0	BGP_PU2_JPIPE_INSTRUCTIONS	PU2: Number of J-pipe instructions
1	1	BGP_PU2_JPIPE_ADD_SUB	PU2: PowerPC Add/Sub in J-pipe
1	2	BGP_PU2_JPIPE_LOGICAL_OPS	PU2: PowerPC logical operations in J-pipe
1	3	BGP_PU2_JPIPE_SHROTMK	PU2: Shift, rotate, mask instructions
1	4	BGP_PU2_IPIPE_INSTRUCTIONS	PU2: Number of I-pipe instructions
1	5	BGP_PU2_IPIPE_MULT_DIV	PU2: PowerPC Mul/Div in I-pipe
1	6	BGP_PU2_IPIPE_ADD_SUB	PU2: PowerPC Add/Sub in I-pipe
1	7	BGP_PU2_IPIPE_LOGICAL_OPS	PU2: PowerPC logical operations in I-pipe
1	8	BGP_PU2_IPIPE_SHROTMK	PU2: Shift, rotate, mask instructions
1	9	BGP_PU2_IPIPE_BRANCHES	PU2: PowerPC branches
1	10	BGP_PU2_IPIPE_TLB_OPS	PU2: PowerPC TLB operations
1	11	BGP_PU2_IPIPE_PROCESS_CONTROL	PU2: PowerPC process control
1	12	BGP_PU2_IPIPE_OTHER	PU2: PowerPC other I-pipe operations
1	13	BGP_PU2_DCACHE_LINEFILLINPROG	PU2: Number of cycles D-cache LineFillInProgress
1	14	BGP_PU2_ICACHE_LINEFILLINPROG	PU2: Number of cycles I-cache LineFillInProgress
1	15	BGP_PU2_DCACHE_MISS	PU2: Accesses to D cache that miss in D Cache

Group	Counter	Event name	Event description
1	16	BGP_PU2_DCACHE_HIT	PU2: Accesses to D cache that hit in D Cache
1	17	BGP_PU2_DATA_LOADS	PU2: PowerPC data loads
1	18	BGP_PU2_DATA_STORES	PU2: PowerPC data stores
1	19	BGP_PU2_DCACHE_OPS	PU2: D cache operations
1	20	BGP_PU2_ICACHE_MISS	PU2: Accesses to I cache that miss in I Cache
1	21	BGP_PU2_ICACHE_HIT	PU2: Accesses to I cache that hit in I Cache
1	22	BGP_PU2_FPU_ADD_SUB_1	PU2: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
1	23	BGP_PU2_FPU_MULT_1	PU2: PowerPC FP Mult (fmul, fmuls)
1	24	BGP_PU2_FPU_FMA_2	PU2: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
1	25	BGP_PU2_FPU_DIV_1	PU2: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
1	26	BGP_PU2_FPU_OTHER_NON_STORAGE_OPS	PU2: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
1	27	BGP_PU2_FPU_ADD_SUB_2	PU2: Dual pipe Add/Sub (fpadd, fpsub)
1	28	BGP_PU2_FPU_MULT_2	PU2: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
1	29	BGP_PU2_FPU_FMA_4	PU2: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
1	30	BGP_PU2_FPU_DUAL_PIPE_OTHER_NON_STORAGE_OPS	PU2: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
1	31	BGP_PU2_FPU_QUADWORD_LOADS	PU2: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
1	32	BGP_PU2_FPU_OTHER_LOADS	PU2: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)

Group	Counter	Event name	Event description
1	33	BGP_PU2_FPU_QUADWORD_STORES	PU2: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
1	34	BGP_PU2_FPU_OTHER_STORES	PU2: All other FPU stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
1	35	BGP_PU3_JPIPE_INSTRUCTIONS	PU3: Number of J-pipe instructions
1	36	BGP_PU3_JPIPE_ADD_SUB	PU3: PowerPC Add/Sub in J-pipe
1	37	BGP_PU3_JPIPE_LOGICAL_OPS	PU3: PowerPC logical operations in J-pipe
1	38	BGP_PU3_JPIPE_SHROTMK	PU3: Shift, rotate, mask instructions
1	39	BGP_PU3_IPIPE_INSTRUCTIONS	PU3: Number of I-pipe instructions
1	40	BGP_PU3_IPIPE_MULT_DIV	PU3: PowerPC Mul/Div in I-pipe
1	41	BGP_PU3_IPIPE_ADD_SUB	PU3: PowerPC Add/Sub in I-pipe
1	42	BGP_PU3_IPIPE_LOGICAL_OPS	PU3: PowerPC logical operations in I-pipe
1	43	BGP_PU3_IPIPE_SHROTMK	PU3: Shift, rotate, mask instructions
1	44	BGP_PU3_IPIPE_BRANCHES	PU3: PowerPC branches
1	45	BGP_PU3_IPIPE_TLB_OPS	PU3: PowerPC TLB operations
1	46	BGP_PU3_IPIPE_PROCESS_CONTROL	PU3: PowerPC process control
1	47	BGP_PU3_IPIPE_OTHER	PU3: PowerPC other I-pipe operations
1	48	BGP_PU3_DCACHE_LINEFILLINPROG	PU3: Number of cycles D-cache LineFillInProgress
1	49	BGP_PU3_ICACHE_LINEFILLINPROG	PU3: Number of cycles I-cache LineFillInProgress
1	50	BGP_PU3_DCACHE_MISS	PU3: Accesses to D cache that miss in D Cache
1	51	BGP_PU3_DCACHE_HIT	PU3: Accesses to D cache that hit in D Cache
1	52	BGP_PU3_DATA_LOADS	PU3: PowerPC data loads
1	53	BGP_PU3_DATA_STORES	PU3: PowerPC data stores
1	54	BGP_PU3_DCACHE_OPS	PU3: D cache operations
1	55	BGP_PU3_ICACHE_MISS	PU3: Accesses to I cache that miss in I Cache
1	56	BGP_PU3_ICACHE_HIT	PU3: Accesses to I cache that hit in I Cache
1	57	BGP_PU3_FPU_ADD_SUB_1	PU3: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
1	58	BGP_PU3_FPU_MULT_1	PU3: PowerPC FP Mult (fmul, fmuls)

Group	Counter	Event name	Event description
1	59	BGP_PU3_FPU_FMA_2	PU3: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
1	60	BGP_PU3_FPU_DIV_1	PU3: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
1	61	BGP_PU3_FPU_OTHER_NON_STORAGE_OPS	PU3: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
1	62	BGP_PU3_FPU_ADD_SUB_2	PU3: Dual pipe Add/Sub (fpadd, fpsub)
1	63	BGP_PU3_FPU_MULT_2	PU3: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
1	64	BGP_PU3_FPU_FMA_4	PU3: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
1	65	BGP_PU3_FPU_DUAL_PIPE_OTHER_NON_STORAGE_OPS	PU3: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
1	66	BGP_PU3_FPU_QUADWORD_LOADS	PU3: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
1	67	BGP_PU3_FPU_OTHER_LOADS	PU3: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
1	68	BGP_PU3_FPU_QUADWORD_STORES	PU3: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
1	69	BGP_PU3_FPU_OTHER_STORES	PU3: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
1	70	BGP_PU2_L1_INVALIDATION_REQUESTS	PU2 L1: Invalidation requested
1	71	BGP_PU3_L1_INVALIDATION_REQUESTS	PU3 L1: Invalidation requested
1	72	BGP_COL_AC_CH2_VC0_MATURE_UM1	Collective: arbiter_core ch2_vc0_mature
1	73	BGP_COL_AC_CH1_VC0_MATURE_UM1	Collective: arbiter_core ch1_vc0_mature
1	74	BGP_COL_AC_CH0_VC0_MATURE_UM1	Collective: arbiter_core ch0_vc0_mature

Group	Counter	Event name	Event description
1	75	BGP_COL_AC_INJECT_VC0_MATURE_UM1	Collective: arbiter_core inj_vc0_mature
1	76	BGP_COL_AC_CH2_VC1_MATURE_UM1	Collective: arbiter_core ch2_vc1_mature
1	77	BGP_COL_AC_CH1_VC1_MATURE_UM1	Collective: arbiter_core ch1_vc1_mature
1	78	BGP_COL_AC_CH0_VC1_MATURE_UM1	Collective: arbiter_core ch0_vc1_mature
1	79	BGP_COL_AC_INJECT_VC1_MATURE_UM1	Collective: arbiter_core inj_vc1_mature
1	80	BGP_COL_AR0_VC0_EMPTY_PACKET	Collective: Receiver 0 vc0 empty packet
1	81	BGP_COL_AR0_VC1_EMPTY_PACKET	Collective: Receiver 0 vc1 empty packet
1	82	BGP_COL_AR0_IDLE_PACKET	Collective: Receiver 0 IDLE packet
1	83	BGP_COL_AR0_BAD_PACKET_MARKER	Collective: Receiver 0 known-bad-packet marker
1	84	BGP_COL_AR0_VC0_CUT_THROUGH	Collective: Receiver 0 vc0 cut-through
1	85	BGP_COL_AR0_VC1_CUT_THROUGH	Collective: Receiver 0 vc1 cut-through
1	86	BGP_COL_AR0_HEADER_PARITY_ERROR	Collective: Receiver 0 header parity error
1	87	BGP_COL_AR0_UNEXPECTED_HEADER_ERROR	Collective: Receiver 0 unexpected header error
1	88	BGP_COL_AR0_RESYNC	Collective: Receiver 0 resynch-mode (after error)
1	89	BGP_COL_AR1_VC0_EMPTY_PACKET	Collective: Receiver 1 vc0 empty packet
1	90	BGP_COL_AR1_VC1_EMPTY_PACKET	Collective: Receiver 1 vc1 empty packet
1	91	BGP_COL_AR1_IDLE_PACKET	Collective: Receiver 1 IDLE packet
1	92	BGP_COL_AR1_BAD_PACKET_MARKER	Collective: Receiver 1 known-bad-packet marker
1	93	BGP_COL_AR1_VC0_CUT_THROUGH	Collective: Receiver 1 vc0 cut-through
1	94	BGP_COL_AR1_VC1_CUT_THROUGH	Collective: Receiver 1 vc1 cut-through
1	95	BGP_COL_AR1_HEADER_PARITY_ERROR	Collective: Receiver 1 header parity error
1	96	BGP_COL_AR1_UNEXPECTED_HEADER_ERROR	Collective: Receiver 1 unexpected header error
1	97	BGP_COL_AR1_RESYNC	Collective: Receiver 1 resynch-mode (after error)
1	98	BGP_COL_AR2_VC0_EMPTY_PACKET	Collective: Receiver 2 vc0 empty packet
1	99	BGP_COL_AR2_VC1_EMPTY_PACKET	Collective: Receiver 2 vc1 empty packet
1	100	BGP_COL_AR2_IDLE_PACKET	Collective: Receiver 2 IDLE packet
1	101	BGP_COL_AR2_BAD_PACKET_MARKER	Collective: Receiver 2 known-bad-packet marker

Group	Counter	Event name	Event description
1	102	BGP_COL_AR2_VC0_CUT_THROUGH	Collective: Receiver 2 vc0 cut-through
1	103	BGP_COL_AR2_VC1_CUT_THROUGH	Collective: Receiver 2 vc1 cut-through
1	104	BGP_COL_AR2_HEADER_PARITY_ERROR	Collective: Receiver 2 header parity error
1	105	BGP_COL_AR2_UNEXPECTED_HEADER_ERROR	Collective: Receiver 2 unexpected header error
1	106	BGP_COL_AR2_RESYNC	Collective: Receiver 2 resynch-mode (after error)
1	107	BGP_COL_AS0_VC0_CUT_THROUGH	Collective: Sender 0 vc0 cut-through
1	108	BGP_COL_AS0_VC1_CUT_THROUGH	Collective: Sender 0 vc1 cut-through
1	109	BGP_COL_AS0_VC0_PACKETS_SENT	Collective: Sender 0 vc0 packet sent (total)
1	110	BGP_COL_AS0_VC1_PACKETS_SENT	Collective: Sender 0 vc1 packet sent (total)
1	111	BGP_COL_AS0_IDLE_PACKETS_SENT	Collective: Sender 0 IDLE packets sent
1	112	BGP_COL_AS1_VC0_CUT_THROUGH	Collective: Sender 1 vc0 cut-through
1	113	BGP_COL_AS1_VC1_CUT_THROUGH	Collective: Sender 1 vc1 cut-through
1	114	BGP_COL_AS1_VC0_PACKETS_SENT	Collective: Sender 1 vc0 packets sent (total)
1	115	BGP_COL_AS1_VC1_PACKETS_SENT	Collective: Sender 1 vc1 packets sent (total)
1	116	BGP_COL_AS1_IDLE_PACKETS_SENT	Collective: Sender 1 IDLE packets sent
1	117	BGP_COL_AS2_VC0_CUT_THROUGH	Collective: Sender 2 vc0 cut-through
1	118	BGP_COL_AS2_VC1_CUT_THROUGH	Collective: Sender 2 vc1 cut-through
1	119	BGP_COL_AS2_VC0_PACKETS_SENT	Collective: Sender 2 vc0 packets sent (total)
1	120	BGP_COL_AS2_VC1_PACKETS_SENT	Collective: Sender 2 vc1 packets sent (total)
1	121	BGP_COL_AS2_IDLE_PACKETS_SENT	Collective: Sender 2 IDLE packets sent
1	122	BGP_COL_INJECT_VC0_PAYLOAD_ADDED	Collective: Injection vc0 payload added
1	123	BGP_COL_INJECT_VC1_PAYLOAD_ADDED	Collective: Injection vc1 payload added
1	124	BGP_COL_INJECT_VC0_PACKET_TAKEN	Collective: Injection vc0 packet taken
1	125	BGP_COL_INJECT_VC1_PACKET_TAKEN	Collective: Injection vc1 packet taken
1	126	BGP_COL_RECEPTION_VC0_HEADER_TAKEN	Collective: Reception vc0 header taken
1	127	BGP_COL_RECEPTION_VC1_HEADER_TAKEN	Collective: Reception vc1 header taken
1	128	BGP_COL_RECEPTION_VC0_PAYLOAD_TAKEN	Collective: Reception vc0 payload taken
1	129	BGP_COL_RECEPTION_VC1_PAYLOAD_TAKEN	Collective: Reception vc1 payload taken

Group	Counter	Event name	Event description
1	130	BGP_COL_RECEPTION_VC0_PACKET_ DISCARDED	Collective: Reception vc0 packet discarded
1	131	BGP_COL_RECEPTION_VC1_PACKET_ DISCARDED	Collective: Reception vc1 packet discarded
1	132	BGP_PU2_L2_VALID_PREFETCH_REQUESTS	PU2 L2: Prefetch request valid
1	133	BGP_PU2_L2_PREFETCH_HITS_IN_FILTER	PU2 L2: Prefetch hits in filter
1	134	BGP_PU2_L2_PREFETCH_HITS_IN_STREAM	PU2 L2: Prefetch hits in active stream
1	135	BGP_PU2_L2_CYCLES_PREFETCH_PENDING	PU2 L2: Number of cycles for which an L2-prefetch is pending
1	136	BGP_PU2_L2_PAGE_ALREADY_IN_L2	PU2 L2: Requested PF is already in L2
1	137	BGP_PU2_L2_PREFETCH_SNOOP_HIT_ SAME_CORE	PU2 L2: Prefetch snoop hit from same core (write)
1	138	BGP_PU2_L2_PREFETCH_SNOOP_HIT_OTHER_ CORE	PU2 L2: Prefetch snoop hit from other core
1	139	BGP_PU2_L2_PREFETCH_SNOOP_HIT_PLB	PU2 L2: Prefetch snoop hit PLB (write)
1	140	BGP_PU2_L2_CYCLES_READ_REQUEST_ PENDING	PU2 L2: Number of cycles for which a read request is pending
1	141	BGP_PU2_L2_READ_REQUESTS	PU2 L2: read requests
1	142	BGP_PU2_L2_DEVBUS_READ_REQUESTS	PU2 L2: devbus read requests (for SRAM, LOCK and UPC)
1	143	BGP_PU2_L2_L3_READ_REQUESTS	PU2 L2: L3 read request
1	144	BGP_PU2_L2_NETBUS_READ_REQUESTS	PU2 L2: netbus read requests (for tree and torus)
1	145	BGP_PU2_L2_BLIND_DEV_READ_REQUESTS	PU2 L2: BLIND device read request
1	146	BGP_PU2_L2_PREFETCHABLE_REQUESTS	PU2 L2: Prefetchable requests
1	147	BGP_PU2_L2_HIT	PU2 L2: L2 hit
1	148	BGP_PU2_L2_SAME_CORE_SNOOPS	PU2 L2: Same core snoops
1	149	BGP_PU2_L2_OTHER_CORE_SNOOPS	PU2 L2: Other core snops
1	150	BGP_PU2_L2_OTHER_DP_PU0_SNOOPS	PU2 L2: Other DP PU2 snoops
1	151	BGP_PU2_L2_OTHER_DP_PU1_SNOOPS	PU2 L2: Other DP PU1 snoops
1	152	BGP_PU2_L2_RESERVED_1	PU2 L2: Reserved
1	153	BGP_PU2_L2_RESERVED_2	PU2 L2: Reserved
1	154	BGP_PU2_L2_RESERVED_3	PU2 L2: Reserved
1	155	BGP_PU2_L2_RESERVED_4	PU2 L2: Reserved
1	156	BGP_PU2_L2_RESERVED_5	PU2 L2: Reserved
1	157	BGP_PU2_L2_RESERVED_6	PU2 L2: Reserved
1	158	BGP_PU2_L2_RESERVED_7	PU2 L2: Reserved

Group	Counter	Event name	Event description
1	159	BGP_PU2_L2_RESERVED_8	PU2 L2: Reserved
1	160	BGP_PU2_L2_RESERVED_9	PU2 L2: Reserved
1	161	BGP_PU2_L2_RESERVED_10	PU2 L2: Number of writes to L3
1	162	BGP_PU2_L2_RESERVED_11	PU2 L2: Number of writes to network
1	163	BGP_PU2_L2_RESERVED_12	PU2 L2: Number of writes to devbus
1	164	BGP_PU3_L2_VALID_PREFETCH_REQUESTS	PU3 L2: Prefetch request valid
1	165	BGP_PU3_L2_PREFETCH_HITS_IN_FILTER	PU3 L2: Prefetch hits in filter
1	166	BGP_PU3_L2_PREFETCH_HITS_IN_STREAM	PU3 L2: Prefetch hits in active stream
1	167	BGP_PU3_L2_CYCLES_PREFETCH_PENDING	PU3 L2: Number of cycles for which an L2-prefetch is pending
1	168	BGP_PU3_L2_PAGE_ALREADY_IN_L2	PU3 L2: requested PF is already in L2
1	169	BGP_PU3_L2_PREFETCH_SNOOP_HIT_ SAME_CORE	PU3 L2: Prefetch snoop hit from same core (write)
1	170	BGP_PU3_L2_PREFETCH_SNOOP_HIT_OTHER_ CORE	PU3 L2: Prefetch snoop hit from other core
1	171	BGP_PU3_L2_PREFETCH_SNOOP_HIT_PLB	PU3 L2: Prefetch snoop hit PLB (write)
1	172	BGP_PU3_L2_CYCLES_READ_REQUEST_ PENDING	PU3 L2: Number of cycles for which a read request is pending
1	173	BGP_PU3_L2_READ_REQUESTS	PU3 L2: read requests
1	174	BGP_PU3_L2_DEVBUS_READ_REQUESTS	PU3 L2: Devbus read requests (for SRAM, LOCK and UPC)
1	175	BGP_PU3_L2_L3_READ_REQUESTS	PU3 L2: L3 read request
1	176	BGP_PU3_L2_NETBUS_READ_REQUESTS	PU3 L2: netbus read requests (for tree and torus)
1	177	BGP_PU3_L2_BLIND_DEV_READ_REQUESTS	PU3 L2: BLIND device read request
1	178	BGP_PU3_L2_PREFETCHABLE_REQUESTS	PU3 L2: Prefetchable requests
1	179	BGP_PU3_L2_HIT	PU3 L2: L2 hit
1	180	BGP_PU3_L2_SAME_CORE_SNOOPS	PU3 L2: Same core snoops
1	181	BGP_PU3_L2_OTHER_CORE_SNOOPS	PU3 L2: Other core snops
1	182	BGP_PU3_L2_OTHER_DP_PU0_SNOOPS	PU3 L2: Other DP PU0 snoops
1	183	BGP_PU3_L2_OTHER_DP_PU1_SNOOPS	PU3 L2: Other DP PU3 snoops
1	184	BGP_PU3_L2_RESERVED_1	PU3 L2: Reserved
1	185	BGP_PU3_L2_RESERVED_2	PU3 L2: Reserved
1	186	BGP_PU3_L2_RESERVED_3	PU3 L2: Reserved
1	187	BGP_PU3_L2_RESERVED_4	PU3 L2: Reserved
1	188	BGP_PU3_L2_RESERVED_5	PU3 L2: Reserved

Group	Counter	Event name	Event description
1	189	BGP_PU3_L2_RESERVED_6	PU3 L2: Reserved
1	190	BGP_PU3_L2_RESERVED_7	PU3 L2: Reserved
1	191	BGP_PU3_L2_RESERVED_8	PU3 L2: Reserved
1	192	BGP_PU3_L2_RESERVED_9	PU3 L2: Reserved
1	193	BGP_PU3_L2_RESERVED_10	PU3 L2: Number of writes to L3
1	194	BGP_PU3_L2_RESERVED_11	PU3 L2: Number of writes to network
1	195	BGP_PU3_L2_RESERVED_12	PU3 L2: Number of writes to devbus
1	196	BGP_L3_M0_R2_SINGLE_LINE_DELIVERED_L2	L3 M0: Rd 2: Single line delivered to L2
1	197	BGP_L3_M0_R2_BURST_DELIVERED_L2	L3 M0: Rd 2: Burst delivered to L2
1	198	BGP_L3_M0_R2_READ_RETURN_COLLISION	L3 M0: Rd 2: Read return collision
1	199	BGP_L3_M0_R2_DIR0_HIT_OR_INFLIGHT	L3 M0: Rd 2: dir0 hit or in flight
1	200	BGP_L3_M0_R2_DIR0_MISS_OR_LOCKDOWN	L3 M0: Rd 2: dir0 miss or lock-down
1	201	BGP_L3_M0_R2_DIR1_HIT_OR_INFLIGHT	L3 M0: Rd 2: dir1 hit or in flight
1	202	BGP_L3_M0_R2_DIR1_MISS_OR_LOCKDOWN	L3 M0: Rd 2: dir1 miss or lock-down
1	203	BGP_L3_M0_W0_DEPOSIT_REQUESTS	L3 M0: WRB 0: total accepted deposit requests from write queues to write buffer
1	204	BGP_L3_M0_W0_CYCLES_REQUESTS_ NOT_TAKEN	L3 M0: WRB 0: Number of cycles with requests from queues that are not taken
1	205	BGP_L3_M0_W1_DEPOSIT_REQUESTS	L3 M0: WRB 1: Total accepted deposit requests from write queues to write buffer
1	206	BGP_L3_M0_W1_CYCLES_REQUESTS_ NOT_TAKEN	L3 M0: WRB 1: Number of cycles with requests from queues that are not taken
1	207	BGP_L3_M0_MH_ALLOCATION_REQUESTS	L3 M0: MH: Number of allocation requests to write buffer
1	208	BGP_L3_M0_MH_CYCLES_ALLOCATION_ REQUESTS_NOT_TAKEN	L3 M0: MH: Number of allocation request cycles to write buffer without being taken
1	209	BGP_L3_M0_PF_PREFETCH_INTO_ EDRAM	L3 M0: PF: Number of line prefetches brought into eDRAM
1	210	BGP_L3_M0_RESERVED_1	L3 M0: Reserved
1	211	BGP_L3_M0_RESERVED_2	L3 M0: Reserved
1	212	BGP_L3_M0_RESERVED_3	L3 M0: Reserved
1	213	BGP_L3_M0_RESERVED_4	L3 M0: Reserved
1	214	BGP_L3_M0_RESERVED_5	L3 M0: Reserved
1	215	BGP_L3_M0_RESERVED_6	L3 M0: Reserved
1	216	BGP_L3_M1_R2_SINGLE_LINE_DELIVERED_L2	L3 M1: Rd 2: Single line delivered to L2

Group	Counter	Event name	Event description
1	217	BGP_L3_M1_R2_BURST_DELIVERED_L2	L3 M1: Rd 2: Burst delivered to L2
1	218	BGP_L3_M1_R2_READ_RETURN_COLLISION	L3 M1: Rd 2: Read return collision
1	219	BGP_L3_M1_R2_DIR0_HIT_OR_INFLIGHT	L3 M1: Rd 2: dir0 hit or in flight
1	220	BGP_L3_M1_R2_DIR0_MISS_OR_LOCKDOWN	L3 M1: Rd 2: dir0 miss or lock-down
1	221	BGP_L3_M1_R2_DIR1_HIT_OR_INFLIGHT	L3 M1: Rd 2: dir1 hit or in flight
1	222	BGP_L3_M1_R2_DIR1_MISS_OR_LOCKDOWN	L3 M1: Rd 2: dir1 miss or lock-down
1	223	BGP_L3_M1_W0_DEPOSIT_REQUESTS	L3 M1: WRB 0: Total accepted deposit requests from write queues to write buffer
1	224	BGP_L3_M1_W0_CYCLES_REQUESTS_ NOT_TAKEN	L3 M1: WRB 0: Number of cycles with requests from queues that are not taken
1	225	BGP_L3_M1_W1_DEPOSIT_REQUESTS	L3 M1: WRB 1: Total accepted deposit requests from write queues to write buffer
1	226	BGP_L3_M1_W1_CYCLES_REQUESTS_ NOT_TAKEN	L3 M1: WRB 1: Number of cycles with requests from queues that are not taken
1	227	BGP_L3_M1_MH_ALLOCATION_REQUESTS	L3 M1: MH: Number of allocation requests to write buffer
1	228	BGP_L3_M1_MH_CYCLES_ALLOCATION_ REQUESTS_NOT_TAKEN	L3 M1: MH: Number of allocation request cycles to writebuffer without being taken
1	229	BGP_L3_M1_PF_PREFETCH_INTO_EDRAM	L3 M1: PF: Number of line prefetches brought into eDRAM
1	230	BGP_L3_M1_RESERVED_1	L3 M1: Reserved
1	231	BGP_L3_M1_RESERVED_2	L3 M1: Reserved
1	232	BGP_L3_M1_RESERVED_3	L3 M1: Reserved
1	233	BGP_L3_M1_RESERVED_4	L3 M1: Reserved
1	234	BGP_L3_M1_RESERVED_5	L3 M1: Reserved
1	235	BGP_L3_M1_RESERVED_6	L3 M1: Reserved
1	236	BGP_PU2_SNOOP_PORT0_REMOTE_ SOURCE_REQUESTS	PU2 snoop: Port 0 received a snoop request from a remote source
1	237	BGP_PU2_SNOOP_PORT1_REMOTE_ SOURCE_REQUESTS	PU2 snoop: Port 1 received a snoop request from a remote source
1	238	BGP_PU2_SNOOP_PORT2_REMOTE_ SOURCE_REQUESTS	PU2 snoop: Port 2 received a snoop request from a remote source
1	239	BGP_PU2_SNOOP_PORT3_REMOTE_ SOURCE_REQUESTS	PU2 snoop: Port 3 received a snoop request from a remote source
1	240	BGP_PU2_SNOOP_PORT0_REJECTED_ REQUESTS	PU2 snoop: Port 0 snoop filter rejected a snoop request

Group	Counter	Event name	Event description
1	241	BGP_PU2_SNOOP_PORT1_REJECTED_ REQUESTS	PU2 snoop: Port 1 snoop filter rejected a snoop request
1	242	BGP_PU2_SNOOP_PORT2_REJECTED_ REQUESTS	PU2 snoop: Port 2 snoop filter rejected a snoop request
1	243	BGP_PU2_SNOOP_PORT3_REJECTED_ REQUESTS	PU2 snoop: Port 3 snoop filter rejected a snoop request
1	244	BGP_PU2_SNOOP_L1_CACHE_WRAP	PU2 snoop: Snoop filter detected an L1 cache wrap
1	245	BGP_PU3_SNOOP_PORT0_REMOTE_ SOURCE_REQUESTS	PU3 snoop: Port 0 received a snoop request from a remote source
1	246	BGP_PU3_SNOOP_PORT1_REMOTE_ SOURCE_REQUESTS	PU3 snoop: Port 1 received a snoop request from a remote source
1	247	BGP_PU3_SNOOP_PORT2_REMOTE_ SOURCE_REQUESTS	PU3 snoop: Port 2 received a snoop request from a remote source
1	248	BGP_PU3_SNOOP_PORT3_REMOTE_ SOURCE_REQUESTS	PU3 snoop: Port 3 received a snoop request from a remote source
1	249	BGP_PU3_SNOOP_PORT0_REJECTED_ REQUESTS	PU3 snoop: Port 0 snoop filter rejected a snoop request
1	250	BGP_PU3_SNOOP_PORT1_REJECTED_ REQUESTS	PU3 snoop: Port 1 snoop filter rejected a snoop request
1	251	BGP_PU3_SNOOP_PORT2_REJECTED_ REQUESTS	PU3 snoop: Port 2 snoop filter rejected a snoop request
1	252	BGP_PU3_SNOOP_PORT3_REJECTED_ REQUESTS	PU3 snoop: Port 3 snoop filter rejected a snoop request
1	253	BGP_PU3_SNOOP_L1_CACHE_WRAP	PU3 snoop: Snoop filter detected an L1 cache wrap
1	254	BGP_MISC_RESERVED_3	Misc: Reserved
1	255	BGP_MISC_ELAPSED_TIME_UM1	Misc: Elapsed tmie
2	0	BGP_PU0_JPIPE_INSTRUCTIONS_UM2	PU0: Number of J-pipe instructions
2	1	BGP_PU0_JPIPE_ADD_SUB_UM2	PU0: PowerPC Add/Sub in J-pipe
2	2	BGP_PU0_JPIPE_LOGICAL_OPS_UM2	PU0: PowerPC logical operations in J-pipe
2	3	BGP_PU0_JPIPE_SHROTMK_UM2	PU0: Shift, rotate, mask instructions
2	4	BGP_PU0_IPIPE_INSTRUCTIONS_UM2	PU0: Number of I-pipe instructions
2	5	BGP_PU0_IPIPE_MULT_DIV_UM2	PU0: PowerPC Mul/Div in I-pipe
2	6	BGP_PU0_IPIPE_ADD_SUB_UM2	PU0: PowerPC Add/Sub in I-pipe
2	7	BGP_PU0_IPIPE_LOGICAL_OPS_UM2	PU0: PowerPC logical operations in I-pipe
2	8	BGP_PU0_IPIPE_SHROTMK_UM2	PU0: Shift, rotate, mask instructions
2	9	BGP_PU0_IPIPE_BRANCHES_UM2	PU0: PowerPC branches

Group	Counter	Event name	Event description
2	10	BGP_PU0_IPIPE_TLB_OPS_UM2	PU0: PowerPC TLB operations
2	11	BGP_PU0_IPIPE_PROCESS_CONTROL_UM2	PU0: PowerPC process control
2	12	BGP_PU0_IPIPE_OTHER_UM2	PU0: PowerPC other I-pipe operations
2	13	BGP_PU0_DCACHE_LINEFILLINPROG_UM2	PU0: Number of cycles D-cache LineFillInProgress
2	14	BGP_PU0_ICACHE_LINEFILLINPROG_UM2	PU0: Number of cycles I-cache LineFillInProgress
2	15	BGP_PU0_DCACHE_MISS_UM2	PU0: Accesses to D cache that miss in D Cache
2	16	BGP_PU0_DCACHE_HIT_UM2	PU0: Accesses to D cache that hit in D Cache
2	17	BGP_PU0_DATA_LOADS_UM2	PU0: PowerPC data loads
2	18	BGP_PU0_DATA_STORES_UM2	PU0: PowerPC data stores
2	19	BGP_PU0_DCACHE_OPS_UM2	PU0: D cache operations
2	20	BGP_PU0_ICACHE_MISS_UM2	PU0: Accesses to I cache that miss in I Cache
2	21	BGP_PU0_ICACHE_HIT_UM2	PU0: Accesses to I cache that hit in I Cache
2	22	BGP_PU0_FPU_ADD_SUB_1_UM2	PU0: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
2	23	BGP_PU0_FPU_MULT_1_UM2	PU0: PowerPC FP Mult (fmul, fmuls)
2	24	BGP_PU0_FPU_FMA_2_UM2	PU0: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
2	25	BGP_PU0_FPU_DIV_1_UM2	PU0: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
2	26	BGP_PU0_FPU_OTHER_NON_STORAGE_ OPS_UM2	PU0: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
2	27	BGP_PU0_FPU_ADD_SUB_2_UM2	PU0: Dual pipe Add/Sub (fpadd, fpsub)
2	28	BGP_PU0_FPU_MULT_2_UM2	PU0: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
2	29	BGP_PU0_FPU_FMA_4_UM2	PU0: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)

Group	Counter	Event name	Event description
2	30	BGP_PU0_FPU_DUAL_PIPE_OTHER_NON_ STORAGE_OPS_UM2	PU0: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
2	31	BGP_PU0_FPU_QUADWORD_LOADS_UM2	PU0: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
2	32	BGP_PU0_FPU_OTHER_LOADS_UM2	PU0: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
2	33	BGP_PU0_FPU_QUADWORD_STORES_UM2	PU0: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
2	34	BGP_PU0_FPU_OTHER_STORES_UM2	PU0: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
2	35	BGP_PU1_JPIPE_INSTRUCTIONS_UM2	PU1: Number of J-pipe instructions
2	36	BGP_PU1_JPIPE_ADD_SUB_UM2	PU1: PowerPC Add/Sub in J-pipe
2	37	BGP_PU1_JPIPE_LOGICAL_OPS_UM2	PU1: PowerPC logical operations in J-pipe
2	38	BGP_PU1_JPIPE_SHROTMK_UM2	PU1: Shift, rotate, mask instructions
2	39	BGP_PU1_IPIPE_INSTRUCTIONS_UM2	PU1: Number of I-pipe instructions
2	40	BGP_PU1_IPIPE_MULT_DIV_UM2	PU1: PowerPC Mul/Div in I-pipe
2	41	BGP_PU1_IPIPE_ADD_SUB_UM2	PU1: PowerPC Add/Sub in I-pipe
2	42	BGP_PU1_IPIPE_LOGICAL_OPS_UM2	PU1: PowerPC logical operations in I-pipe
2	43	BGP_PU1_IPIPE_SHROTMK_UM2	PU1: Shift, rotate, mask instructions
2	44	BGP_PU1_IPIPE_BRANCHES_UM2	PU1: PowerPC branches
2	45	BGP_PU1_IPIPE_TLB_OPS_UM2	PU1: PowerPC TLB operations
2	46	BGP_PU1_IPIPE_PROCESS_CONTROL_UM2	PU1: PowerPC process control
2	47	BGP_PU1_IPIPE_OTHER_UM2	PU1: PowerPC other I-pipe operations
2	48	BGP_PU1_DCACHE_LINEFILLINPROG_UM2	PU1: Number of cycles D-cache LineFillInProgress
2	49	BGP_PU1_ICACHE_LINEFILLINPROG_UM2	PU1: Number of cycles I-cache LineFillInProgress
2	50	BGP_PU1_DCACHE_MISS_UM2	PU1: Accesses to D cache that miss in D Cache
2	51	BGP_PU1_DCACHE_HIT_UM2	PU1: Accesses to D cache that hit in D Cache
2	52	BGP_PU1_DATA_LOADS_UM2	PU1: PowerPC data loads
2	53	BGP_PU1_DATA_STORES_UM2	PU1: PowerPC data stores

Group	Counter	Event name	Event description
2	54	BGP_PU1_DCACHE_OPS_UM2	PU1: D cache operations
2	55	BGP_PU1_ICACHE_MISS_UM2	PU1: Accesses to I cache that miss in I Cache
2	56	BGP_PU1_ICACHE_HIT_UM2	PU1: Accesses to I cache that hit in I Cache
2	57	BGP_PU1_FPU_ADD_SUB_1_UM2	PU1: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
2	58	BGP_PU1_FPU_MULT_1_UM2	PU1: PowerPC FP Mult (fmul, fmuls)
2	59	BGP_PU1_FPU_FMA_2_UM2	PU1: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
2	60	BGP_PU1_FPU_DIV_1_UM2	PU1: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
2	61	BGP_PU1_FPU_OTHER_NON_STORAGE_ OPS_UM2	PU1: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
2	62	BGP_PU1_FPU_ADD_SUB_2_UM2	PU1: Dual pipe Add/Sub (fpadd, fpsub)
2	63	BGP_PU1_FPU_MULT_2_UM2	PU1: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
2	64	BGP_PU1_FPU_FMA_4_UM2	PU1: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
2	65	BGP_PU1_FPU_DUAL_PIPE_OTHER_NON_ STORAGE_OPS_UM2	PU1: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
2	66	BGP_PU1_FPU_QUADWORD_LOADS_UM2	PU1: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
2	67	BGP_PU1_FPU_OTHER_LOADS_UM2	PU1: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
2	68	BGP_PU1_FPU_QUADWORD_STORES_UM2	PU1: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
2	69	BGP_PU1_FPU_OTHER_STORES_UM2	PU1: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)

Group	Counter	Event name	Event description
2	70	BGP_PU0_L1_INVALIDATION_UM2	PU0 L1: Invalidation requested
2	71	BGP_PU1_L1_INVALIDATION_UM2	PU1 L1: Invalidation requested
2	72	BGP_PU0_SNOOP_PORT0_CACHE_REJECTED_REQUEST	PU0 snoop: Port 0 snoop cache rejected a request
2	73	BGP_PU0_SNOOP_PORT1_CACHE_REJECTED_REQUEST	PU0 snoop: Port 1 snoop cache rejected a request
2	74	BGP_PU0_SNOOP_PORT2_CACHE_REJECTED_REQUEST	PU0 snoop: Port 2 snoop cache rejected a request
2	75	BGP_PU0_SNOOP_PORT3_CACHE_REJECTED_REQUEST	PU0 snoop: Port 3 snoop cache rejected a request
2	76	BGP_PU0_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU0 snoop: Port 0 request hit a stream register in the active set
2	77	BGP_PU0_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU0 snoop: Port 1 request hit a stream register in the active set
2	78	BGP_PU0_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU0 snoop: Port 2 request hit a stream register in the active set
2	79	BGP_PU0_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU0 snoop: Port 3 request hit a stream register in the active set
2	80	BGP_PU0_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU0 snoop: Port 0 request hit a stream register in the history set
2	81	BGP_PU0_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU0 snoop: Port 1 request hit a stream register in the history set
2	82	BGP_PU0_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU0 snoop: Port 2 request hit a stream register in the history set
2	83	BGP_PU0_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU0 snoop: Port 3 request hit a stream register in the history set
2	84	BGP_PU0_SNOOP_PORT0_STREAM_REGISTER_REJECTED_REQUEST	PU0 snoop: Port 0 stream register rejected a request
2	85	BGP_PU0_SNOOP_PORT1_STREAM_REGISTER_REJECTED_REQUEST	PU0 snoop: Port 1 stream register rejected a request
2	86	BGP_PU0_SNOOP_PORT2_STREAM_REGISTER_REJECTED_REQUEST	PU0 snoop: Port 2 stream register rejected a request
2	87	BGP_PU0_SNOOP_PORT3_STREAM_REGISTER_REJECTED_REQUEST	PU0 snoop: Port 3 stream register rejected a request
2	88	BGP_PU0_SNOOP_PORT0_RANGE_FILTER_REJECTED_REQUEST	PU0 snoop: Port 0 range filter rejected a request
2	89	BGP_PU0_SNOOP_PORT1_RANGE_FILTER_REJECTED_REQUEST	PU0 snoop: Port 1 range filter rejected a request
2	90	BGP_PU0_SNOOP_PORT2_RANGE_FILTER_REJECTED_REQUEST	PU0 snoop: Port 2 range filter rejected a request
2	91	BGP_PU0_SNOOP_PORT3_RANGE_FILTER_REJECTED_REQUEST	PU0 snoop: Port 3 range filter rejected a request

Group	Counter	Event name	Event description
2	92	BGP_PU0_SNOOP_PORT0_UPDATED_CACHE_LINE	PU0 snoop: Port 0 snoop cache updated cache line
2	93	BGP_PU0_SNOOP_PORT1_UPDATED_CACHE_LINE	PU0 snoop: Port 1 snoop cache updated cache line
2	94	BGP_PU0_SNOOP_PORT2_UPDATED_CACHE_LINE	PU0 snoop: Port 2 snoop cache updated cache line
2	95	BGP_PU0_SNOOP_PORT3_UPDATED_CACHE_LINE	PU0 snoop: Port 3 snoop cache updated cache line
2	96	BGP_PU0_SNOOP_PORT0_FILTERED_BY_CACHE_AND_REGISTERS	PU0 snoop: Port 0 snoop filtered by both snoop cache and filter registers
2	97	BGP_PU0_SNOOP_PORT1_FILTERED_BY_CACHE_AND_REGISTERS	PU0 snoop: Port 1 snoop filtered by both snoop cache and filter registers
2	98	BGP_PU0_SNOOP_PORT2_FILTERED_BY_CACHE_AND_REGISTERS	PU0 snoop: Port 2 snoop filtered by both snoop cache and filter registers
2	99	BGP_PU0_SNOOP_PORT3_FILTERED_BY_CACHE_AND_REGISTERS	PU0 snoop: Port 3 snoop filtered by both snoop cache and filter registers
2	100	BGP_PU1_SNOOP_PORT0_CACHE_REJECTED_REQUEST	PU1 snoop: Port 0 snoop cache rejected a request
2	101	BGP_PU1_SNOOP_PORT1_CACHE_REJECTED_REQUEST	PU1 snoop: Port 1 snoop cache rejected a request
2	102	BGP_PU1_SNOOP_PORT2_CACHE_REJECTED_REQUEST	PU1 snoop: Port 2 snoop cache rejected a request
2	103	BGP_PU1_SNOOP_PORT3_CACHE_REJECTED_REQUEST	PU1 snoop: Port 3 snoop cache rejected a request
2	104	BGP_PU1_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU1 snoop: Port 0 request hit a stream register in the active set
2	105	BGP_PU1_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU1 snoop: Port 1 request hit a stream register in the active set
2	106	BGP_PU1_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU1 snoop: Port 2 request hit a stream register in the active set
2	107	BGP_PU1_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU1 snoop: Port 3 request hit a stream register in the active set
2	108	BGP_PU1_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU1 snoop: Port 0 request hit a stream register in the history set
2	109	BGP_PU1_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU1 snoop: Port 1 request hit a stream register in the history set
2	110	BGP_PU1_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU1 snoop: Port 2 request hit a stream register in the history set
2	111	BGP_PU1_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU1 snoop: Port 3 request hit a stream register in the history set
2	112	BGP_PU1_SNOOP_PORT0_STREAM_REGISTER_REJECTED_REQUEST	PU1 snoop: Port 0 stream register rejected a request

Group	Counter	Event name	Event description
2	113	BGP_PU1_SNOOP_PORT1_STREAM_REGISTER_REJECTED_REQUEST	PU1 snoop: Port 1 stream register rejected a request
2	114	BGP_PU1_SNOOP_PORT2_STREAM_REGISTER_REJECTED_REQUEST	PU1 snoop: Port 2 stream register rejected a request
2	115	BGP_PU1_SNOOP_PORT3_STREAM_REGISTER_REJECTED_REQUEST	PU1 snoop: Port 3 stream register rejected a request
2	116	BGP_PU1_SNOOP_PORT0_RANGE_FILTER_REJECTED_REQUEST	PU1 snoop: Port 0 range filter rejected a request
2	117	BGP_PU1_SNOOP_PORT1_RANGE_FILTER_REJECTED_REQUEST	PU1 snoop: Port 1 range filter rejected a request
2	118	BGP_PU1_SNOOP_PORT2_RANGE_FILTER_REJECTED_REQUEST	PU1 snoop: Port 2 range filter rejected a request
2	119	BGP_PU1_SNOOP_PORT3_RANGE_FILTER_REJECTED_REQUEST	PU1 snoop: Port 3 range filter rejected a request
2	120	BGP_PU1_SNOOP_PORT0_UPDATED_CACHE_LINE	PU1 snoop: Port 0 snoop cache updated cache line
2	121	BGP_PU1_SNOOP_PORT1_UPDATED_CACHE_LINE	PU1 snoop: Port 1 snoop cache updated cache line
2	122	BGP_PU1_SNOOP_PORT2_UPDATED_CACHE_LINE	PU1 snoop: Port 2 snoop cache updated cache line
2	123	BGP_PU1_SNOOP_PORT3_UPDATED_CACHE_LINE	PU1 snoop: Port 3 snoop cache updated cache line
2	124	BGP_PU1_SNOOP_PORT0_FILTERED_BY_CACHE_AND_REGISTERS	PU1 snoop: Port 0 snoop filtered by both snoop cache and filter registers
2	125	BGP_PU1_SNOOP_PORT1_FILTERED_BY_CACHE_AND_REGISTERS	PU1 snoop: Port 1 snoop filtered by both snoop cache and filter registers
2	126	BGP_PU1_SNOOP_PORT2_FILTERED_BY_CACHE_AND_REGISTERS	PU1 snoop: Port 2 snoop filtered by both snoop cache and filter registers
2	127	BGP_PU1_SNOOP_PORT3_FILTERED_BY_CACHE_AND_REGISTERS	PU1 snoop: Port 3 snoop filtered by both snoop cache and filter registers
2	128	BGP_TORUS_XP_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in xp
2	129	BGP_TORUS_XP_ACKS	Torus: Number of protocol ack packets in xp
2	130	BGP_TORUS_XP_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0
2	131	BGP_TORUS_XP_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	132	BGP_TORUS_XP_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	133	BGP_TORUS_XP_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3

Group	Counter	Event name	Event description
2	134	BGP_TORUS_XP_NO_TOKENS	Torus: xp link avail, no vcd0 vcd1 tokens
2	135	BGP_TORUS_XP_NO_VCD0_TOKENS	Torus: xp link avail; no vcd0 vcd; vcbn tokens
2	136	BGP_TORUS_XP_NO_VCBN_TOKENS	Torus: xp link avail; no vcbn tokens
2	137	BGP_TORUS_XP_NO_VCBP_TOKENS	Torus: xp link avail; no vcbp tokens
2	138	BGP_TORUS_XM_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in xm
2	139	BGP_TORUS_XM_ACKS	Torus: Number of protocol ack packets in xm
2	140	BGP_TORUS_XM_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0
2	141	BGP_TORUS_XM_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	142	BGP_TORUS_XM_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	143	BGP_TORUS_XM_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3
2	144	BGP_TORUS_XM_NO_TOKENS	Torus: xm link avail; no vcd0 vcd1 tokens
2	145	BGP_TORUS_XM_NO_VCD0_TOKENS	Torus: xm link avail; no vcd0 vcd; vcbn tokens
2	146	BGP_TORUS_XM_NO_VCBN_TOKENS	Torus: xm link avail; no vcbn tokens
2	147	BGP_TORUS_XM_NO_VCBP_TOKENS	Torus: xm link avail; no vcbp tokens
2	148	BGP_TORUS_YP_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in yp
2	149	BGP_TORUS_YP_ACKS	Torus: Number of protocol ack packets in yp
2	150	BGP_TORUS_YP_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0
2	151	BGP_TORUS_YP_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	152	BGP_TORUS_YP_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	153	BGP_TORUS_YP_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3
2	154	BGP_TORUS_YP_NO_TOKENS	Torus: yp link avail; no vcd0 vcd1tokens
2	155	BGP_TORUS_YP_NO_VCD0_TOKENS	Torus: yp link avail; no vcd0 vcd; vcbn tokens
2	156	BGP_TORUS_YP_NO_VCBN_TOKENS	Torus: yp link avail; no vcbn tokens
2	157	BGP_TORUS_YP_NO_VCBP_TOKENS	Torus: yp link avail; no vcbp tokens

Group	Counter	Event name	Event description
2	158	BGP_TORUS_YM_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in ym
2	159	BGP_TORUS_YM_ACKS	Torus: Number of protocol ack packets in ym
2	160	BGP_TORUS_YM_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0
2	161	BGP_TORUS_YM_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	162	BGP_TORUS_YM_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	163	BGP_TORUS_YM_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3
2	164	BGP_TORUS_YM_NO_TOKENS	Torus: ym link avail; no vcd0 vcd1 tokens
2	165	BGP_TORUS_YM_NO_VCD0_TOKENS	Torus: ym link avail; no vcd0 vcd; vcbn tokens
2	166	BGP_TORUS_YM_NO_VCBN_TOKENS	Torus: ym link avail; no vcbn tokens
2	167	BGP_TORUS_YM_NO_VCBP_TOKENS	Torus: ym link avail; no vcbp tokens
2	168	BGP_TORUS_ZP_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in zp
2	169	BGP_TORUS_ZP_ACKS	Torus: Number of protocol ack packets in zp
2	170	BGP_TORUS_ZP_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0
2	171	BGP_TORUS_ZP_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	172	BGP_TORUS_ZP_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	173	BGP_TORUS_ZP_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3
2	174	BGP_TORUS_ZP_NO_TOKENS	Torus: zp link avail; no vcd0 vcd1 tokens
2	175	BGP_TORUS_ZP_NO_VCD0_TOKENS	Torus: zp link avail; no vcd0 vcd; vcbn tokens
2	176	BGP_TORUS_ZP_NO_VCBN_TOKENS	Torus: zp link avail; no vcbn tokens
2	177	BGP_TORUS_ZP_NO_VCBP_TOKENS	Torus: zp link avail; no vcbp tokens
2	178	BGP_TORUS_ZM_TOKEN_ACK_PACKETS	Torus: Number of protocol token/ack packets in zm
2	179	BGP_TORUS_ZM_ACKS	Torus: Number of protocol ack packets in zm
2	180	BGP_TORUS_ZM_VCD0_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 0

Group	Counter	Event name	Event description
2	181	BGP_TORUS_ZM_VCD1_32BCHUNKS	Torus: Number of 32B chunks sent on dynamic vc 1
2	182	BGP_TORUS_ZM_VCBN_32BCHUNKS	Torus: Number of 32B chunks sent on bubble vc 2
2	183	BGP_TORUS_ZM_VCBP_32BCHUNKS	Torus: Number of 32B chunks sent on priority vc 3
2	184	BGP_TORUS_ZM_NO_TOKENS	Torus: zm link avail; no vcd0 vcd1 tokens
2	185	BGP_TORUS_ZM_NO_VCD0_TOKENS	Torus: zm link avail; no vcd0 vcd; vcbn tokens
2	186	BGP_TORUS_RESERVED_1	Torus: zm link avail; no vcbn tokens
2	187	BGP_TORUS_RESERVED_2	Torus: zm link avail; no vcbp tokens
2	188	BGP_DMA_RESERVED_7	DMA: Reserved
2	189	BGP_DMA_RESERVED_8	DMA: Reserved
2	190	BGP_DMA_RESERVED_9	DMA: Reserved
2	191	BGP_DMA_RESERVED_10	DMA: Reserved
2	192	BGP_DMA_RESERVED_11	DMA: Reserved
2	193	BGP_DMA_RESERVED_12	DMA: Reserved
2	194	BGP_DMA_RESERVED_13	DMA: Reserved
2	195	BGP_DMA_RESERVED_14	DMA: Reserved
2	196	BGP_DMA_RESERVED_15	DMA: Reserved
2	197	BGP_DMA_RESERVED_16	DMA: Reserved
2	198	BGP_DMA_RESERVED_17	DMA: Reserved
2	199	BGP_DMA_RESERVED_18	DMA: Reserved
2	200	BGP_DMA_RESERVED_19	DMA: Reserved
2	201	BGP_DMA_RESERVED_20	DMA: Reserved
2	202	BGP_DMA_RESERVED_21	DMA: Reserved
2	203	BGP_DMA_RESERVED_22	DMA: Reserved
2	204	BGP_COL_AR2_ABORT_UM2	Collective: Arbiter receiver 2 abort
2	205	BGP_COL_AR1_ABORT_UM2	Collective: Arbiter receiver 1 abort
2	206	BGP_COL_AR0_ABORT_UM2	Collective: Arbiter receiver 0 abort
2	207	BGP_COL_A_LOCAL_CLIENT_ABORT	Collective: Arbiter local client abort
2	208	BGP_COL_AR0_VC0_FULL	Collective: Receiver 0 vc0 full
2	209	BGP_COL_AR0_VC1_FULL	Collective: Receiver 0 vc1 full
2	210	BGP_COL_AR1_VC0_FULL	Collective: Receiver 1 vc0 full
2	211	BGP_COL_AR1_VC1_FULL	Collective: Receiver 1 vc1 full

Group	Counter	Event name	Event description
2	212	BGP_COL_AR2_VC0_FULL	Collective: Receiver 2 vc0 full
2	213	BGP_COL_AR2_VC1_FULL	Collective: Receiver 2 vc1 full
2	214	BGP_COL_AS0_VC0_EMPTY	Collective: Sender 0 vc0 empty
2	215	BGP_COL_AS0_VC1_EMPTY	Collective: Sender 0 vc1 empty
2	216	BGP_COL_AS0_RESENDS	Collective: Sender 0 resend attempts
2	217	BGP_COL_AS1_VC0_EMPTY	Collective: Sender 1 vc0 empty
2	218	BGP_COL_AS1_VC1_EMPTY	Collective: Sender 1 vc1 empty
2	219	BGP_COL_AS1_RESENDS	Collective: Sender 1 resend attempts
2	220	BGP_COL_AS2_VC0_EMPTY	Collective: Sender 2 vc0 empty
2	221	BGP_COL_AS2_VC1_EMPTY	Collective: Sender 2 vc1 empty
2	222	BGP_COL_AS2_RESENDS	Collective: Sender 2 resend attempts
2	223	BGP_MISC_RESERVED_4	Misc: Reserved
2	224	BGP_MISC_RESERVED_5	Misc: Reserved
2	225	BGP_MISC_RESERVED_6	Misc: Reserved
2	226	BGP_MISC_RESERVED_7	Misc: Reserved
2	227	BGP_MISC_RESERVED_8	Misc: Reserved
2	228	BGP_MISC_RESERVED_9	Misc: Reserved
2	229	BGP_MISC_RESERVED_10	Misc: Reserved
2	230	BGP_MISC_RESERVED_11	Misc: Reserved
2	231	BGP_MISC_RESERVED_12	Misc: Reserved
2	232	BGP_MISC_RESERVED_13	Misc: Reserved
2	233	BGP_MISC_RESERVED_14	Misc: Reserved
2	234	BGP_MISC_RESERVED_15	Misc: Reserved
2	235	BGP_MISC_RESERVED_16	Misc: Reserved
2	236	BGP_MISC_RESERVED_17	Misc: Reserved
2	237	BGP_MISC_RESERVED_18	Misc: Reserved
2	238	BGP_MISC_RESERVED_19	Misc: Reserved
2	239	BGP_MISC_RESERVED_20	Misc: Reserved
2	240	BGP_MISC_RESERVED_21	Misc: Reserved
2	241	BGP_MISC_RESERVED_22	Misc: Reserved
2	242	BGP_MISC_RESERVED_23	Misc: Reserved
2	243	BGP_MISC_RESERVED_24	Misc: Reserved
2	244	BGP_MISC_RESERVED_25	Misc: Reserved
2	245	BGP_MISC_RESERVED_26	Misc: Reserved

Group	Counter	Event name	Event description
2	246	BGP_MISC_RESERVED_27	Misc: Reserved
2	247	BGP_MISC_RESERVED_28	Misc: Reserved
2	248	BGP_MISC_RESERVED_29	Misc: Reserved
2	249	BGP_MISC_RESERVED_30	Misc: Reserved
2	250	BGP_MISC_RESERVED_31	Misc: Reserved
2	251	BGP_MISC_RESERVED_32	Misc: Reserved
2	252	BGP_MISC_RESERVED_33	Misc: Reserved
2	253	BGP_MISC_RESERVED_34	Misc: Reserved
2	254	BGP_MISC_RESERVED_35	Misc: Reserved
2	255	BGP_MISC_ELAPSED_TIME_UM2	Misc: Elapsed time
3	0	BGP_PU2_JPIPE_INSTRUCTIONS_UM3	PU2: Number of J-pipe instructions
3	1	BGP_PU2_JPIPE_ADD_SUB_UM3	PU2: PowerPC Add/Sub in J-pipe
3	2	BGP_PU2_JPIPE_LOGICAL_OPS_UM3	PU2: PowerPC logical operations in J-pipe
3	3	BGP_PU2_JPIPE_SHROTMK_UM3	PU2: Shift, rotate, mask instructions
3	4	BGP_PU2_IPIPE_INSTRUCTIONS_UM3	PU2: Number of I-pipe instructions
3	5	BGP_PU2_IPIPE_MULT_DIV_UM3	PU2: PowerPC Mul/Div in I-pipe
3	6	BGP_PU2_IPIPE_ADD_SUB_UM3	PU2: PowerPC Add/Sub in I-pipe
3	7	BGP_PU2_IPIPE_LOGICAL_OPS_UM3	PU2: PowerPC logical operations in I-pipe
3	8	BGP_PU2_IPIPE_SHROTMK_UM3	PU2: Shift, rotate, mask instructions
3	9	BGP_PU2_IPIPE_BRANCHES_UM3	PU2: PowerPC branches
3	10	BGP_PU2_IPIPE_TLB_OPS_UM3	PU2: PowerPC TLB operations
3	11	BGP_PU2_IPIPE_PROCESS_CONTROL_UM3	PU2: PowerPC process control
3	12	BGP_PU2_IPIPE_OTHER_UM3	PU2: PowerPC other I-pipe operations
3	13	BGP_PU2_DCACHE_LINEFILLINPROG_UM3	PU2: Number of cycles D-cache LineFillInProgress
3	14	BGP_PU2_ICACHE_LINEFILLINPROG_UM3	PU2: Number of cycles I-cache LineFillInProgress
3	15	BGP_PU2_DCACHE_MISS_UM3	PU2: Accesses to D cache that miss in D Cache
3	16	BGP_PU2_DCACHE_HIT_UM3	PU2: Accesses to D cache that hit in D Cache
3	17	BGP_PU2_DATA_LOADS_UM3	PU2: PowerPC data loads
3	18	BGP_PU2_DATA_STORES_UM3	PU2: PowerPC data stores
3	19	BGP_PU2_DCACHE_OPS_UM3	PU2: D cache operations

Group	Counter	Event name	Event description
3	20	BGP_PU2_ICACHE_MISS_UM3	PU2: Accesses to I cache that miss in I Cache
3	21	BGP_PU2_ICACHE_HIT_UM3	PU2: Accesses to I cache that hit in I Cache
3	22	BGP_PU2_FPU_ADD_SUB_1_UM3	PU2: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
3	23	BGP_PU2_FPU_MULT_1_UM3	PU2: PowerPC FP Mult (fmul, fmuls)
3	24	BGP_PU2_FPU_FMA_2_UM3	PU2: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
3	25	BGP_PU2_FPU_DIV_1_UM3	PU2: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)
3	26	BGP_PU2_FPU_OTHER_NON_STORAGE_ OPS_UM3	PU2: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
3	27	BGP_PU2_FPU_ADD_SUB_2_UM3	PU2: Dual pipe Add/Sub (fpadd, fpsub)
3	28	BGP_PU2_FPU_MULT_2_UM3	PU2: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
3	29	BGP_PU2_FPU_FMA_4_UM3	PU2: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
3	30	BGP_PU2_FPU_DUAL_PIPE_OTHER_NON_ STORAGE_OPS_UM3	PU2: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
3	31	BGP_PU2_FPU_QUADWORD_LOADS_UM3	PU2: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
3	32	BGP_PU2_FPU_OTHER_LOADS_UM3	PU2: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
3	33	BGP_PU2_FPU_QUADWORD_STORES_UM3	PU2: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
3	34	BGP_PU2_FPU_OTHER_STORES_UM3	PU2: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
3	35	BGP_PU3_JPIPE_INSTRUCTIONS_UM3	PU3: Number of J-pipe instructions

Group	Counter	Event name	Event description
3	36	BGP_PU3_JPIPE_ADD_SUB_UM3	PU3: PowerPC Add/Sub in J-pipe
3	37	BGP_PU3_JPIPE_LOGICAL_OPS_UM3	PU3: PowerPC logical operations in J-pipe
3	38	BGP_PU3_JPIPE_SHROTMK_UM3	PU3: Shift, rotate, mask instructions
3	39	BGP_PU3_IPIPE_INSTRUCTIONS_UM3	PU3: Number of I-pipe instructions
3	40	BGP_PU3_IPIPE_MULT_DIV_UM3	PU3: PowerPC Mul/Div in I-pipe
3	41	BGP_PU3_IPIPE_ADD_SUB_UM3	PU3: PowerPC Add/Sub in I-pipe
3	42	BGP_PU3_IPIPE_LOGICAL_OPS_UM3	PU3: PowerPC logical operations in I-pipe
3	43	BGP_PU3_IPIPE_SHROTMK_UM3	PU3: Shift, rotate, mask instructions
3	44	BGP_PU3_IPIPE_BRANCHES_UM3	PU3: PowerPC branches
3	45	BGP_PU3_IPIPE_TLB_OPS_UM3	PU3: PowerPC TLB operations
3	46	BGP_PU3_IPIPE_PROCESS_CONTROL_UM3	PU3: PowerPC process control
3	47	BGP_PU3_IPIPE_OTHER_UM3	PU3: PowerPC other I-pipe operations
3	48	BGP_PU3_DCACHE_LINEFILLINPROG_UM3	PU3: Number of cycles D-cache LineFillInProgress
3	49	BGP_PU3_ICACHE_LINEFILLINPROG_UM3	PU3: Number of cycles I-cache LineFillInProgress
3	50	BGP_PU3_DCACHE_MISS_UM3	PU3: Accesses to D cache that miss in D Cache
3	51	BGP_PU3_DCACHE_HIT_UM3	PU3: Accesses to D cache that hit in D Cache
3	52	BGP_PU3_DATA_LOADS_UM3	PU3: PowerPC data loads
3	53	BGP_PU3_DATA_STORES_UM3	PU3: PowerPC data stores
3	54	BGP_PU3_DCACHE_OPS_UM3	PU3: D cache operations
3	55	BGP_PU3_ICACHE_MISS_UM3	PU3: Accesses to I cache that miss in I Cache
3	56	BGP_PU3_ICACHE_HIT_UM3	PU3: Accesses to I cache that hit in I Cache
3	57	BGP_PU3_FPU_ADD_SUB_1_UM3	PU3: PowerPC FP Add/Sub (fadd, fadds, fsub, fsubs)
3	58	BGP_PU3_FPU_MULT_1_UM3	PU3: PowerPC FP Mult (fmul, fmuls)
3	59	BGP_PU3_FPU_FMA_2_UM3	PU3: PowerPC FP FMA (fmadd, fmadds, fmsub, fmsubs, fnmadd, fnmadds, fnmsub, fnmsubs; one result generated per instruction, two flops)
3	60	BGP_PU3_FPU_DIV_1_UM3	PU3: PowerPC FP Div (fdiv, fdivs; Single Pipe Divide)

Group	Counter	Event name	Event description
3	61	BGP_PU3_FPU_OTHER_NON_STORAGE_ OPS_UM3	PU3: PowerPC FP remaining non-storage instructions (fabs, fnabs, frsp, fctiw, fctiwz, fres, frsqrte, fsel, fmr, fneg, fcmpu, fcmpo, mffs, mcrfs, mtfsfi, mtfsf, mtfsb0, mtfsb1)
3	62	BGP_PU3_FPU_ADD_SUB_2_UM3	PU3: Dual pipe Add/Sub (fpadd, fpsub)
3	63	BGP_PU3_FPU_MULT_2_UM3	PU3: Dual pipe Mult (fpmul, fxmul, fxpmul, fxsmul)
3	64	BGP_PU3_FPU_FMA_4_UM3	PU3: Dual pipe FMAs (fpmadd, fpnmadd, fpmsub, fpnmsub, fxmadd, fxnmadd, fxmsub, fxnmsub, fxcpmadd, fxcsmadd, fxcpnmadd, fxcsnmadd, fxcpmsub, fxcsmsub, fxcpnmsub, fxcsnmsub, fxcpnpma, fxcsnpma, fxcpnsma, fxcsnsma, fxcxnpma, fxcxnsma, fxcxma, fxcxnms; two results generated per instruction, four flops)
3	65	BGP_PU3_FPU_DUAL_PIPE_OTHER_NON_ STORAGE_OPS_UM3	PU3: Dual pipe remaining non-storage instructions (fpmr, fpneg, fsmr, fsneg, fxmr, fsmfp, fsmtp, fpabs, fpnabs, fsabs, fsnabs, fprsp, fpctiw, fpctiwz, fpre, fprsqrte, fpsel, fscmp)
3	66	BGP_PU3_FPU_QUADWORD_LOADS_UM3	PU3: Quad Word Loads (ffpdx, lfpdux, lfxdx, lfxdux)
3	67	BGP_PU3_FPU_OTHER_LOADS_UM3	PU3: All other Loads (lfs, lfsx, lfsu, lfsux, lfpsx, fpsux, lfsdx, lfsdux, lfssx, lfssux, lfd, lfdx, lfdu, lfdux, lfxsx, lfxsux)
3	68	BGP_PU3_FPU_QUADWORD_STORES_UM3	PU3: Quad Word Stores (stfpdx, stfpdux, stfxdx, stfxdux)
3	69	BGP_PU3_FPU_OTHER_STORES_UM3	PU3: All other FPU Stores (stfs, stfsx, stfsu, stfsux, stfd, stfdx, stfdu, stfdux, stfiwx, stfpsx, stfpsux, stfpiwx, stfsdx, stfsdux, stfssx,stfssux, stfxsx, stfxsux)
3	70	BGP_PU2_L1_INVALIDATION_UM3	PU2 L1: Invalidation requested
3	71	BGP_PU3_L1_INVALIDATION_UM3	PU3 L1: Invalidation requested
3	72	BGP_COL_A_CH2_VC0_HAVE	Collective: Arbiter ch2_vc0_have
3	73	BGP_COL_A_CH1_VC0_HAVE	Collective: Arbiter ch1_vc0_have
3	74	BGP_COL_A_CH0_VC0_HAVE	Collective: Arbiter ch0_vc0_have
3	75	BGP_COL_A_INJECT_VC0_HAVE	Collective: Arbiter inj_vc0_have
3	76	BGP_COL_A_CH2_VC1_HAVE	Collective: Arbiter ch2_vc1_have
3	77	BGP_COL_A_CH1_VC1_HAVE	Collective: Arbiter ch1_vc1_have
3	78	BGP_COL_A_CH0_VC1_HAVE	Collective: Arbiter ch0_vc1_have
3	79	BGP_COL_A_INJECT_VC1_HAVE	Collective: Arbiter inj_vc1_have
3	80	BGP_COL_AC_GREEDY_MODE	Collective: arbiter_core greedy_mode

Group	Counter	Event name	Event description
3	81	BGP_COL_AC_PENDING_REQUESTS_UM3	Collective: arbiter_core requests pending
3	82	BGP_COL_AC_WAITING_REQUESTS_UM3	Collective: arbiter_core requests waiting (ready to go)
3	83	BGP_COL_ACLS0_WINS	Collective: Arbiter class 0 wins
3	84	BGP_COL_ACLS1_WINS	Collective: Arbiter class 1 wins
3	85	BGP_COL_ACLS2_WINS	Collective: Arbiter class 2 wins
3	86	BGP_COL_ACLS3_WINS	Collective: Arbiter class 3 wins
3	87	BGP_COL_ACLS4_WINS	Collective: Arbiter class 4 wins
3	88	BGP_COL_ACLS5_WINS	Collective: Arbiter class 5 wins
3	89	BGP_COL_ACLS6_WINS	Collective: Arbiter class 6 wins
3	90	BGP_COL_ACLS7_WINS	Collective: Arbiter class 7 wins
3	91	BGP_COL_ACLS8_WINS	Collective: Arbiter class 8 wins
3	92	BGP_COL_ACLS9_WINS	Collective: Arbiter class 9 wins
3	93	BGP_COL_ACLS10_WINS	Collective: Arbiter class 10 wins
3	94	BGP_COL_ACLS11_WINS	Collective: Arbiter class 11 wins
3	95	BGP_COL_ACLS12_WINS	Collective: Arbiter class 12 wins
3	96	BGP_COL_ACLS13_WINS	Collective: Arbiter class 13 wins
3	97	BGP_COL_ACLS14_WINS	Collective: Arbiter class 14 wins
3	98	BGP_COL_ACLS15_WINS	Collective: Arbiter class 15 wins
3	99	BGP_COL_AS2_BUSY	Collective: Arbiter sender 2 busy
3	100	BGP_COL_AS1_BUSY	Collective: Arbiter sender 1 busy
3	101	BGP_COL_AS1_BUSY_RECEPTION	Collective: Arbiter sender 0 busy
3	102	BGP_COL_ALC_BUSY	Collective: Arbiter local client busy (reception)
3	103	BGP_COL_AR2_BUSY	Collective: Arbiter receiver 2 busy
3	104	BGP_COL_AR1_BUSY	Collective: Arbiter receiver 1 busy
3	105	BGP_COL_AR0_BUSY	Collective: Arbiter receiver 0 busy
3	106	BGP_COL_ALC_BUSY_INJECT	Collective: Arbiter local client busy (injection)
3	107	BGP_COL_ALU_BUSY	Collective: Arbiter ALU busy
3	108	BGP_COL_AR2_ABORT_UM3	Collective: Arbiter receiver 2 abort
3	109	BGP_COL_AR1_ABORT_UM3	Collective: Arbiter receiver 1 abort
3	110	BGP_COL_AR0_ABORT_UM3	Collective: Arbiter receiver 0 abort
3	111	BGP_COL_ALC_ABORT	Collective: Arbiter local client abort

Group	Counter	Event name	Event description
3	112	BGP_COL_AR2_PACKET_TAKEN_UM3	Collective: Arbiter receiver 2 packet taken
3	113	BGP_COL_AR1_PACKET_TAKEN_UM3	Collective: Arbiter receiver 1 packet taken
3	114	BGP_COL_AR0_PACKET_TAKEN_UM3	Collective: Arbiter receiver 0 packet taken
3	115	BGP_COL_ALC_PACKET_TAKEN_UM3	Collective: Arbiter local client packet taken
3	116	BGP_COL_AR0_VC0_DATA_PACKET_RECEIVED	Collective: Receiver 0 vc0 data packet received
3	117	BGP_COL_AR0_VC1_DATA_PACKET_RECEIVED	Collective: Receiver 0 vc1 data packet received
3	118	BGP_COL_AR0_VC1_FULL_UM3	Collective: Receiver 0 vc1 full
3	119	BGP_COL_AR0_HEADER_PARITY_ERROR_UM3	Collective: Receiver 0 header parity error
3	120	BGP_COL_AR1_VC0_DATA_PACKET_RECEIVED	Collective: Receiver 1 vc0 data packet received
3	121	BGP_COL_AR1_VC1_DATA_PACKET_RECEIVED	Collective: Receiver 1 vc1 data packet received
3	122	BGP_COL_AR1_VC0_FULL_UM3	Collective: Receiver 1 vc0 full
3	123	BGP_COL_AR1_VC1_FULL_UM3	Collective: Receiver 1 vc1 full
3	124	BGP_COL_AR2_VC0_DATA_PACKET_RECEIVED	Collective: Receiver 2 vc0 data packet received
3	125	BGP_COL_AR2_VC1_DATA_PACKET_RECEIVED	Collective: Receiver 2 vc1 data packet received
3	126	BGP_COL_AR2_VC0_FULL_UM3	Collective: Receiver 2 vc0 full
3	127	BGP_COL_AR2_VC1_FULL_UM3	Collective: Receiver 2 vc1 full
3	128	BGP_COL_AS0_VC0_EMPTY_UM3	Collective: Sender 0 vc0 empty
3	129	BGP_COL_AS0_VC1_EMPTY_UM3	Collective: Sender 0 vc1 empty
3	130	BGP_COL_AS0_VC0_DATA_PACKETS_SENT_UM3	Collective: Sender 0 vc0 DATA packets sent
3	131	BGP_COL_AS0_VC1_DATA_PACKETS_SENT_UM3	Collective: Sender 0 vc1 DATA packets sent
3	132	BGP_COL_AS0_RESENDS_UM3	Collective: Sender 0 resend attempts
3	133	BGP_COL_AS1_VC0_EMPTY_UM3	Collective: Sender 1 vc0 empty
3	134	BGP_COL_AS1_VC1_EMPTY_UM3	Collective: Sender 1 vc1 empty
3	135	BGP_COL_AS1_VC0_DATA_PACKETS_SENT_UM3	Collective: Sender 1 vc0 DATA packets sent
3	136	BGP_COL_AS1_VC1_DATA_PACKETS_SENT_UM3	Collective: Sender 1 vc1 DATA packets sent

Group	Counter	Event name	Event description
3	137	BGP_COL_AS1_RESENDS_UM3	Collective: Sender 1 resend attempts
3	138	BGP_COL_AS2_VC0_EMPTY_UM3	Collective: Sender 2 vc0 empty
3	139	BGP_COL_AS2_VC1_EMPTY_UM3	Collective: Sender 2 vc1 empty
3	140	BGP_COL_AS2_VC0_DATA_PACKETS_SENT_UM3	Collective: Sender 2 vc0 DATA packets sent
3	141	BGP_COL_AS2_VC1_DATA_PACKETS_SENT_UM3	Collective: Sender 2 vc1 DATA packets sent
3	142	BGP_COL_AS2_RESENDS_UM3	Collective: Sender 2 resend attempts
3	143	BGP_COL_INJECT_VC0_HEADER_ADDED	Collective: Injection vc0 header added
3	144	BGP_COL_INJECT_VC1_HEADER_ADDED	Collective: Injection vc1 header added
3	145	BGP_COL_RECEPTION_VC0_PACKED_ADDED	Collective: Reception vc0 packet added
3	146	BGP_COL_RECEPTION_VC1_PACKED_ADDED	Collective: Reception vc1 packet added
3	147	BGP_PU2_SNOOP_PORT0_CACHE_REJECTED_REQUEST	PU2 snoop: Port 0 snoop cache rejected a request
3	148	BGP_PU2_SNOOP_PORT1_CACHE_REJECTED_REQUEST	PU2 snoop: Port 1 snoop cache rejected a request
3	149	BGP_PU2_SNOOP_PORT2_CACHE_REJECTED_REQUEST	PU2 snoop: Port 2 snoop cache rejected a request
3	150	BGP_PU2_SNOOP_PORT3_CACHE_REJECTED_REQUEST	PU2 snoop: Port 3 snoop cache rejected a request
3	151	BGP_PU2_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU2 snoop: Port 0 request hit a stream register in the active set
3	152	BGP_PU2_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU2 snoop: Port 1 request hit a stream register in the active set
3	153	BGP_PU2_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU2 snoop: Port 2 request hit a stream register in the active set
3	154	BGP_PU2_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU2 snoop: Port 3 request hit a stream register in the active set
3	155	BGP_PU2_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU2 snoop: Port 0 request hit a stream register in the history set
3	156	BGP_PU2_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU2 snoop: Port 1 request hit a stream register in the history set
3	157	BGP_PU2_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU2 snoop: Port 2 request hit a stream register in the history set
3	158	BGP_PU2_SNOOP_PORT3_HIT_STREAM_REGISTER_IN_HISTORY_SET	PU2 snoop: Port 3 request hit a stream register in the history set
3	159	BGP_PU2_SNOOP_PORT0_STREAM_REGISTER_REJECTED_REQUEST	PU2 snoop: Port 0 stream register rejected a request
3	160	BGP_PU2_SNOOP_PORT1_STREAM_REGISTER_REJECTED_REQUEST	PU2 snoop: Port 1 stream register rejected a request

Group	Counter	Event name	Event description
3	161	BGP_PU2_SNOOP_PORT2_STREAM_REGISTER_REJECTED_REQUEST	PU2 snoop: Port 2 stream register rejected a request
3	162	BGP_PU2_SNOOP_PORT3_STREAM_REGISTER_REJECTED_REQUEST	PU2 snoop: Port 3 stream register rejected a request
3	163	BGP_PU2_SNOOP_PORT0_RANGE_FILTER_REJECTED_REQUEST	PU2 snoop: Port 0 range filter rejected a request
3	164	BGP_PU2_SNOOP_PORT1_RANGE_FILTER_REJECTED_REQUEST	PU2 snoop: Port 1 range filter rejected a request
3	165	BGP_PU2_SNOOP_PORT2_RANGE_FILTER_REJECTED_REQUEST	PU2 snoop: Port 2 range filter rejected a request
3	166	BGP_PU2_SNOOP_PORT3_RANGE_FILTER_REJECTED_REQUEST	PU2 snoop: Port 3 range filter rejected a request
3	167	BGP_PU2_SNOOP_PORT0_UPDATED_CACHE_LINE	PU2 snoop: Port 0 snoop cache updated cache line
3	168	BGP_PU2_SNOOP_PORT1_UPDATED_CACHE_LINE	PU2 snoop: Port 1 snoop cache updated cache line
3	169	BGP_PU2_SNOOP_PORT2_UPDATED_CACHE_LINE	PU2 snoop: Port 2 snoop cache updated cache line
3	170	BGP_PU2_SNOOP_PORT3_UPDATED_CACHE_LINE	PU2 snoop: Port 3 snoop cache updated cache line
3	171	BGP_PU2_SNOOP_PORT0_FILTERED_BY_CACHE_AND_REGISTERS	PU2 snoop: Port 0 snoop filtered by both snoop cache and filter registers
3	172	BGP_PU2_SNOOP_PORT1_FILTERED_BY_CACHE_AND_REGISTERS	PU2 snoop: Port 1 snoop filtered by both snoop cache and filter registers
3	173	BGP_PU2_SNOOP_PORT2_FILTERED_BY_CACHE_AND_REGISTERS	PU2 snoop: Port 2 snoop filtered by both snoop cache and filter registers
3	174	BGP_PU2_SNOOP_PORT3_FILTERED_BY_CACHE_AND_REGISTERS	PU2 snoop: Port 3 snoop filtered by both snoop cache and filter registers
3	175	BGP_PU3_SNOOP_PORT0_CACHE_REJECTED_REQUEST	PU3 snoop: Port 0 snoop cache rejected a request
3	176	BGP_PU3_SNOOP_PORT1_CACHE_REJECTED_REQUEST	PU3 snoop: Port 1 snoop cache rejected a request
3	177	BGP_PU3_SNOOP_PORT2_CACHE_REJECTED_REQUEST	PU3 snoop: Port 2 snoop cache rejected a request
3	178	BGP_PU3_SNOOP_PORT3_CACHE_REJECTED_REQUEST	PU3 snoop: Port 3 snoop cache rejected a request
3	179	BGP_PU3_SNOOP_PORT0_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU3 snoop: Port 0 request hit a stream register in the active set
3	180	BGP_PU3_SNOOP_PORT1_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU3 snoop: Port 1 request hit a stream register in the active set
3	181	BGP_PU3_SNOOP_PORT2_HIT_STREAM_REGISTER_IN_ACTIVE_SET	PU3 snoop: Port 2 request hit a stream register in the active set

Group	Counter	Event name	Event description
3	182	BGP_PU3_SNOOP_PORT3_HIT_STREAM_ REGISTER_IN_ACTIVE_SET	PU3 snoop: Port 3 request hit a stream register in the active set
3	183	BGP_PU3_SNOOP_PORT0_HIT_STREAM_ REGISTER_IN_HISTORY_SET	PU3 snoop: Port 0 request hit a stream register in the history set
3	184	BGP_PU3_SNOOP_PORT1_HIT_STREAM_ REGISTER_IN_HISTORY_SET	PU3 snoop: Port 1 request hit a stream register in the history set
3	185	BGP_PU3_SNOOP_PORT2_HIT_STREAM_ REGISTER_IN_HISTORY_SET	PU3 snoop: Port 2 request hit a stream register in the history set
3	186	BGP_PU3_SNOOP_PORT3_HIT_STREAM_ REGISTER_IN_HISTORY_SET	PU3 snoop: Port 3 request hit a stream register in the history set
3	187	BGP_PU3_SNOOP_PORT0_STREAM_REGISTER_ REJECTED_REQUEST	PU3 snoop: Port 0 stream register rejected a request
3	188	BGP_PU3_SNOOP_PORT1_STREAM_REGISTER_ REJECTED_REQUEST	PU3 snoop: Port 1 stream register rejected a request
3	189	BGP_PU3_SNOOP_PORT2_STREAM_REGISTER_ REJECTED_REQUEST	PU3 snoop: Port 2 stream register rejected a request
3	190	BGP_PU3_SNOOP_PORT3_STREAM_REGISTER_ REJECTED_REQUEST	PU3 snoop: Port 3 stream register rejected a request
3	191	BGP_PU3_SNOOP_PORT0_RANGE_FILTER_ REJECTED_REQUEST	PU3 snoop: Port 0 range filter rejected a request
3	192	BGP_PU3_SNOOP_PORT1_RANGE_FILTER_ REJECTED_REQUEST	PU3 snoop: Port 1 range filter rejected a request
3	193	BGP_PU3_SNOOP_PORT2_RANGE_FILTER_ REJECTED_REQUEST	PU3 snoop: Port 2 range filter rejected a request
3	194	BGP_PU3_SNOOP_PORT3_RANGE_FILTER_ REJECTED_REQUEST	PU3 snoop: Port 3 range filter rejected a request
3	195	BGP_PU3_SNOOP_PORT0_UPDATED_CACHE_ LINE	PU3 snoop: Port 0 snoop cache updated cache line
3	196	BGP_PU3_SNOOP_PORT1_UPDATED_CACHE_ LINE	PU3 snoop: Port 1 snoop cache updated cache line
3	197	BGP_PU3_SNOOP_PORT2_UPDATED_CACHE_ LINE	PU3 snoop: Port 2 snoop cache updated cache line
3	198	BGP_PU3_SNOOP_PORT3_UPDATED_CACHE_ LINE	PU3 snoop: Port 3 snoop cache updated cache line
3	199	BGP_PU3_SNOOP_PORT0_FILTERED_BY_ CACHE_AND_REGISTERS	PU3 snoop: Port 0 snoop filtered by both snoop cache and filter registers
3	200	BGP_PU3_SNOOP_PORT1_FILTERED_BY_ CACHE_AND_REGISTERS	PU3 snoop: Port 1 snoop filtered by both snoop cache and filter registers
3	201	BGP_PU3_SNOOP_PORT2_FILTERED_BY_ CACHE_AND_REGISTERS	PU3 snoop: Port 2 snoop filtered by both snoop cache and filter registers
3	202	BGP_PU3_SNOOP_PORT3_FILTERED_BY_ CACHE_AND_REGISTERS	PU3 snoop: Port 3 snoop filtered by both snoop cache and filter registers

Group	Counter	Event name	Event description
3	203	BGP_MISC_RESERVED_36	Misc: Reserved
3	204	BGP_MISC_RESERVED_37	Misc: Reserved
3	205	BGP_MISC_RESERVED_38	Misc: Reserved
3	206	BGP_MISC_RESERVED_39	Misc: Reserved
3	207	BGP_MISC_RESERVED_40	Misc: Reserved
3	208	BGP_MISC_RESERVED_41	Misc: Reserved
3	209	BGP_MISC_RESERVED_42	Misc: Reserved
3	210	BGP_MISC_RESERVED_43	Misc: Reserved
3	211	BGP_MISC_RESERVED_44	Misc: Reserved
3	212	BGP_MISC_RESERVED_45	Misc: Reserved
3	213	BGP_MISC_RESERVED_46	Misc: Reserved
3	214	BGP_MISC_RESERVED_47	Misc: Reserved
3	215	BGP_MISC_RESERVED_48	Misc: Reserved
3	216	BGP_MISC_RESERVED_49	Misc: Reserved
3	217	BGP_MISC_RESERVED_50	Misc: Reserved
3	218	BGP_MISC_RESERVED_51	Misc: Reserved
3	219	BGP_MISC_RESERVED_52	Misc: Reserved
3	220	BGP_MISC_RESERVED_53	Misc: Reserved
3	221	BGP_MISC_RESERVED_54	Misc: Reserved
3	222	BGP_MISC_RESERVED_55	Misc: Reserved
3	223	BGP_MISC_RESERVED_56	Misc: Reserved
3	224	BGP_MISC_RESERVED_57	Misc: Reserved
3	225	BGP_MISC_RESERVED_58	Misc: Reserved
3	226	BGP_MISC_RESERVED_59	Misc: Reserved
3	227	BGP_MISC_RESERVED_60	Misc: Reserved
3	228	BGP_MISC_RESERVED_61	Misc: Reserved
3	229	BGP_MISC_RESERVED_62	Misc: Reserved
3	230	BGP_MISC_RESERVED_63	Misc: Reserved
3	231	BGP_MISC_RESERVED_64	Misc: Reserved
3	232	BGP_MISC_RESERVED_65	Misc: Reserved
3	233	BGP_MISC_RESERVED_66	Misc: Reserved
3	234	BGP_MISC_RESERVED_67	Misc: Reserved
3	235	BGP_MISC_RESERVED_68	Misc: Reserved
3	236	BGP_MISC_RESERVED_69	Misc: Reserved

Group	Counter	Event name	Event description
3	237	BGP_MISC_RESERVED_70	Misc: Reserved
3	238	BGP_MISC_RESERVED_71	Misc: Reserved
3	239	BGP_MISC_RESERVED_72	Misc: Reserved
3	240	BGP_MISC_RESERVED_73	Misc: Reserved
3	241	BGP_MISC_RESERVED_74	Misc: Reserved
3	242	BGP_MISC_RESERVED_75	Misc: Reserved
3	243	BGP_MISC_RESERVED_76	Misc: Reserved
3	244	BGP_MISC_RESERVED_77	Misc: Reserved
3	245	BGP_MISC_RESERVED_78	Misc: Reserved
3	246	BGP_MISC_RESERVED_79	Misc: Reserved
3	247	BGP_MISC_RESERVED_80	Misc: Reserved
3	248	BGP_MISC_RESERVED_81	Misc: Reserved
3	249	BGP_MISC_RESERVED_82	Misc: Reserved
3	250	BGP_MISC_RESERVED_83	Misc: Reserved
3	251	BGP_MISC_RESERVED_84	Misc: Reserved
3	252	BGP_MISC_RESERVED_85	Misc: Reserved
3	253	BGP_MISC_RESERVED_86	Misc: Reserved
3	254	BGP_MISC_RESERVED_87	Misc: Reserved
3	255	BGP_MISC_ELAPSED_TIME_UM3	Misc: Elapsed time

6.3 Derived metrics

Some events are difficult to interpret. Sometimes a combination of events provide better information. In the sequel, such a recombination of basic events is called a *derived metric*.

Since each derived metric has its own set of ingredients, not all derived metrics are printed for each group. HPM automatically finds those derived metrics that are computable and prints them. As a convenience to the user, both the value of the derived metric and its definition are printed, if the environment variable HPM_PRINT_FORMULA is set.

6.4 Inheritance

Counter virtualization and the group (that is, the set of events) that is monitored are inherited from the process to any of the group's children, in particular threads that are spawned via OpenMP. However, there are differences among the various operating systems:

- On AIX, all counter values of a process group can be collected.
- On Linux and Blue Gene systems, counter values are available only to the parent, when the child has finished.