

C.6 Common Architecture Opcodes in Numerical Order

Table C–8: Common Architecture Opcodes in Numerical Order

Opcode		Opcode		Opcode	
00	CALL_PAL	11.26	CMOVNE	14.014	ITOFF
01	OPC01	11.28	ORNOT	14.024	ITOFT
02	OPC02	11.40	XOR	14.02A	SQRTG/C
03	OPC03	11.44	CMOVL	14.02B	SQRTT/C
04	OPC04	11.46	CMOVGE	14.04B	SQRTS/M
05	OPC05	11.48	EQV	14.06B	SQRTT/M
06	OPC06	11.61	AMASK	14.08A	SQRTF
07	OPC07	11.64	CMOVLE	14.08B	SQRTS
08	LDA	11.66	CMOVGT	14.0AA	SQRTG
09	LDAH	11.6C	IMPLVER	14.0AB	SQRTT
0A	LDBU	12.02	MSKBL	14.0CB	SQRTS/D
0B	LDQ_U	12.06	EXTBL	14.0EB	SQRTT/D
0C	LDWU	12.0B	INSBL	14.10A	SQRTF/UC
0D	STW	12.12	MSKWL	14.10B	SQRTS/UC
0E	STB	12.16	EXTWL	14.12A	SQRTG/UC
0F	STQ_U	12.1B	INSWL	14.12B	SQRTT/UC
10.00	ADDL	12.22	MSKLL	14.14B	SQRTS/UM
10.02	S4ADDL	12.26	EXTLL	14.16B	SQRTT/UM
10.09	SUBL	12.2B	INSL	14.18A	SQRTF/U
10.0B	S4SUBL	12.30	ZAP	14.18B	SQRTS/U
10.0F	CMPBGE	12.31	ZAPNOT	14.1AA	SQRTG/U
10.12	S8ADDL	12.32	MSKQL	14.1AB	SQRTT/U
10.1B	S8SUBL	12.34	SRL	14.1CB	SQRTS/UD
10.1D	CMPULT	12.36	EXTQL	14.1EB	SQRTT/UD
10.20	ADDQ	12.39	SLL	14.40A	SQRTF/SC
10.22	S4ADDQ	12.3B	INSQL	14.42A	SQRTG/SC
10.29	SUBQ	12.3C	SRA	14.48A	SQRTF/S
10.2B	S4SUBQ	12.52	MSKWH	14.4AA	SQRTG/S
10.2D	CMPEQ	12.57	INSWH	14.50A	SQRTF/SUC
10.32	S8ADDQ	12.5A	EXTWH	14.50B	SQRTS/SUC
10.3B	S8SUBQ	12.62	MSKLN	14.52A	SQRTG/SUC
10.3D	CMPULE	12.67	INSLH	14.52B	SQRTT/SUC
10.40	ADDL/V	12.6A	EXTLN	14.54B	SQRTS/SUM
10.49	SUBL/V	12.72	MSKQH	14.56B	SQRTT/SUM
10.4D	CMPLT	12.77	INSQH	14.58A	SQRTF/SU
10.60	ADDQ/V	12.7A	EXTQH	14.58B	SQRTS/SU
10.69	SUBQ/V	13.00	MULL	14.5AA	SQRTG/SU
10.6D	CMPLE	13.20	MULQ	14.5AB	SQRTT/SU
11.00	AND	13.30	UMULH	14.5CB	SQRTS/SUD
11.08	BIC	13.40	MULL/V	14.5EB	SQRTT/SUD
11.14	CMOVLBS	13.60	MULQ/V	14.70B	SQRTS/SUIC
11.16	CMOVLBC	14.004	ITOFFS	14.72B	SQRTT/SUIC
11.20	BIS	14.00A	SQRTF/C	14.74B	SQRTS/SUIM
11.24	CMOVEQ	14.00B	SQRTS/C	14.76B	SQRTT/SUIM

Table C–8: Common Architecture Opcodes in Numerical Order (Continued)

Opcode		Opcode		Opcode	
14.78B	SQRTS/SUI	15.12F	CVTGQ/VC	15.521	SUBG/SUC
14.7AB	SQRTT/SUI	15.180	ADDF/U	15.522	MULG/SUC
14.7CB	SQRTS/SUID	15.181	SUBF/U	15.523	DIVG/SUC
14.7EB	SQRTT/SUID	15.182	MULF/U	15.52C	CVTGF/SUC
15.000	ADDF/C	15.183	DIVF/U	15.52D	CVTGD/SUC
15.001	SUBF/C	15.19E	CVTDG/U	15.52F	CVTGQ/SVC
15.002	MULF/C	15.1A0	ADDG/U	15.580	ADDF/SU
15.003	DIVF/C	15.1A1	SUBG/U	15.581	SUBF/SU
15.01E	CVTDG/C	15.1A2	MULG/U	15.582	MULF/SU
15.020	ADDG/C	15.1A3	DIVG/U	15.583	DIVF/SU
15.021	SUBG/C	15.1AC	CVTGF/U	15.59E	CVTDG/SU
15.022	MULG/C	15.1AD	CVTGD/U	15.5A0	ADDG/SU
15.023	DIVG/C	15.1AF	CVTGQ/V	15.5A1	SUBG/SU
15.02C	CVTGF/C	15.400	ADDF/SC	15.5A2	MULG/SU
15.02D	CVTGD/C	15.401	SUBF/SC	15.5A3	DIVG/SU
15.02F	CVTGQ/C	15.402	MULF/SC	15.5AC	CVTGF/SU
15.03C	CVTQF/C	15.403	DIVF/SC	15.5AD	CVTGD/SU
15.03E	CVTQG/C	15.41E	CVTDG/SC	15.5AF	CVTGQ/SV
15.080	ADDF	15.420	ADDG/SC	16.000	ADDS/C
15.081	SUBF	15.421	SUBG/SC	16.001	SUBS/C
15.082	MULF	15.422	MULG/SC	16.002	MULS/C
15.083	DIVF	15.423	DIVG/SC	16.003	DIVS/C
15.09E	CVTDG	15.42C	CVTGF/SC	16.020	ADDT/C
15.0A0	ADDG	15.42D	CVTGD/SC	16.021	SUBT/C
15.0A1	SUBG	15.42F	CVTGQ/SC	16.022	MULT/C
15.0A2	MULG	15.480	ADDF/S	16.023	DIVT/C
15.0A3	DIVG	15.481	SUBF/S	16.02C	CVTTS/C
15.0A5	CMPGEQ	15.482	MULF/S	16.02F	CVTTQ/C
15.0A6	CMPGLT	15.483	DIVF/S	16.03C	CVTQS/C
15.0A7	CMPGLE	15.49E	CVTDG/S	16.03E	CVTQT/C
15.0AC	CVTGF	15.4A0	ADDG/S	16.040	ADDS/M
15.0AD	CVTGD	15.4A1	SUBG/S	16.041	SUBS/M
15.0AF	CVTGQ	15.4A2	MULG/S	16.042	MULS/M
15.0BC	CVTQF	15.4A3	DIVG/S	16.043	DIVS/M
15.0BE	CVTQG	15.4A5	CMPGEQ/S	16.060	ADDT/M
15.100	ADDF/UC	15.4A6	CMPGLT/S	16.061	SUBT/M
15.101	SUBF/UC	15.4A7	CMPGLE/S	16.062	MULT/M
15.102	MULF/UC	15.4AC	CVTGF/S	16.063	DIVT/M
15.103	DIVF/UC	15.4AD	CVTGD/S	16.06C	CVTTS/M
15.11E	CVTDG/UC	15.4AF	CVTGQ/S	16.06F	CVTTQ/M
15.120	ADDG/UC	15.500	ADDF/SUC	16.07C	CVTQS/M
15.121	SUBG/UC	15.501	SUBF/SUC	16.07E	CVTQT/M
15.122	MULG/UC	15.502	MULF/SUC	16.080	ADDS
15.123	DIVG/UC	15.503	DIVF/SUC	16.081	SUBS
15.12C	CVTGF/UC	15.51E	CVTDG/SUC	16.082	MULS
15.12D	CVTGD/UC	15.520	ADDG/SUC	16.083	DIVS

Table C–8: Common Architecture Opcodes in Numerical Order (Continued)

Opcode		Opcode		Opcode	
16.0A0	ADDT	16.182	MULS/U	16.5A3	DIVT/SU
16.0A1	SUBT	16.183	DIVS/U	16.5A4	CMPTUN/SU
16.0A2	MULT	16.1A0	ADDT/U	16.5A5	CMPTEQ/SU
16.0A3	DIVT	16.1A1	SUBT/U	16.5A6	CMPTLT/SU
16.0A4	CMPTUN	16.1A2	MULT/U	16.5A7	CMPTLE/SU
16.0A5	CMPTEQ	16.1A3	DIVT/U	16.5AC	CVTTS/SU
16.0A6	CMPTLT	16.1AC	CVTTS/U	16.5AF	CVTTQ/SV
16.0A7	CMPTLE	16.1AF	CVTTQ/V	16.5C0	ADDS/SUD
16.0AC	CVTTS	16.1C0	ADDS/UD	16.5C1	SUBS/SUD
16.0AF	CVTTQ	16.1C1	SUBS/UD	16.5C2	MULS/SUD
16.0BC	CVTQS	16.1C2	MULS/UD	16.5C3	DIVS/SUD
16.0BE	CVTQT	16.1C3	DIVS/UD	16.5E0	ADDT/SUD
16.0C0	ADDS/D	16.1E0	ADDT/UD	16.5E1	SUBT/SUD
16.0C1	SUBS/D	16.1E1	SUBT/UD	16.5E2	MULT/SUD
16.0C2	MULS/D	16.1E2	MULT/UD	16.5E3	DIVT/SUD
16.0C3	DIVS/D	16.1E3	DIVT/UD	16.5EC	CVTTS/SUD
16.0E0	ADDT/D	16.1EC	CVTTS/UD	16.5EF	CVTTQ/SVD
16.0E1	SUBT/D	16.1EF	CVTTQ/VD	16.6AC	CVTST/S
16.0E2	MULT/D	16.2AC	CVTST	16.700	ADDS/SUIC
16.0E3	DIVT/D	16.500	ADDS/SUC	16.701	SUBS/SUIC
16.0EC	CVTTS/D	16.501	SUBS/SUC	16.702	MULS/SUIC
16.0EF	CVTTQ/D	16.502	MULS/SUC	16.703	DIVS/SUIC
16.0FC	CVTQS/D	16.503	DIVS/SUC	16.720	ADDT/SUIC
16.0FE	CVTQT/D	16.520	ADDT/SUC	16.721	SUBT/SUIC
16.100	ADDS/UC	16.521	SUBT/SUC	16.722	MULT/SUIC
16.101	SUBS/UC	16.522	MULT/SUC	16.723	DIVT/SUIC
16.102	MULS/UC	16.523	DIVT/SUC	16.72C	CVTTS/SUIC
16.103	DIVS/UC	16.52C	CVTTS/SUC	16.72F	CVTTQ/SVIC
16.120	ADDT/UC	16.52F	CVTTQ/SVC	16.73C	CVTQS/SUIC
16.121	SUBT/UC	16.540	ADDS/SUM	16.73E	CVTQT/SUIC
16.122	MULT/UC	16.541	SUBS/SUM	16.740	ADDS/SUIM
16.123	DIVT/UC	16.542	MULS/SUM	16.741	SUBS/SUIM
16.12C	CVTTS/UC	16.543	DIVS/SUM	16.742	MULS/SUIM
16.12F	CVTTQ/VC	16.560	ADDT/SUM	16.743	DIVS/SUIM
16.140	ADDS/UM	16.561	SUBT/SUM	16.760	ADDT/SUIM
16.141	SUBS/UM	16.562	MULT/SUM	16.761	SUBT/SUIM
16.142	MULS/UM	16.563	DIVT/SUM	16.762	MULT/SUIM
16.143	DIVS/UM	16.56C	CVTTS/SUM	16.763	DIVT/SUIM
16.160	ADDT/UM	16.56F	CVTTQ/SVM	16.76C	CVTTS/SUIM
16.161	SUBT/UM	16.580	ADDS/SU	16.76F	CVTTQ/SVIM
16.162	MULT/UM	16.581	SUBS/SU	16.77C	CVTQS/SUIM
16.163	DIVT/UM	16.582	MULS/SU	16.77E	CVTQT/SUIM
16.16C	CVTTS/UM	16.583	DIVS/SU	16.780	ADDS/SUI
16.16F	CVTTQ/VM	16.5A0	ADDT/SU	16.781	SUBS/SUI
16.180	ADDS/U	16.5A1	SUBT/SU	16.782	MULS/SUI
16.181	SUBS/U	16.5A2	MULT/SU	16.783	DIVS/SUI

Table C–8: Common Architecture Opcodes in Numerical Order (Continued)

Opcode		Opcode		Opcode	
16.7A0	ADDT/SUI	18.4000	MB	1F	PAL1F
16.7A1	SUBT/SUI	18.4400	WMB	20	LDF
16.7A2	MULT/SUI	18.8000	FETCH	21	LDG
16.7A3	DIVT/SUI	18.A000	FETCH_M	22	LDS
16.7AC	CVTTS/SUI	18.C000	RPCC	23	LDT
16.7AF	CVTTQ/SVI	18.E000	RC	24	STF
16.7BC	CVTQS/SUI	18.E800	ECB	25	STG
16.7BE	CVTQT/SUI	18.F000	RS	26	STS
16.7C0	ADDS/SUID	18.F800	WH64	27	STT
16.7C1	SUBS/SUID	19	PAL19	28	LDL
16.7C2	MULS/SUID	1A.0	JMP	29	LDQ
16.7C3	DIVS/SUID	1A.1	JSR	2A	LDL_L
16.7E0	ADDT/SUID	1A.2	RET	2B	LDQ_L
16.7E1	SUBT/SUID	1A.3	JSR_COROUTINE	2C	STL
16.7E2	MULT/SUID	1B	PAL1B	2D	STQ
16.7E3	DIVT/SUID	1C.00	SEXTB	2E	STL_C
16.7EC	CVTTS/SUID	1C.01	SEXTW	2F	STQ_C
16.7EF	CVTTQ/SVID	1C.30	CTPOP	30	BR
16.7FC	CVTQS/SUID	1C.31	PERR	31	FBEQ
16.7FE	CVTQT/SUID	1C.32	CTLZ	32	FBLT
17.010	CVTLQ	1C.33	CTTZ	33	FBLE
17.020	CPYS	1C.34	UNPKBW	34	BSR
17.021	CPYSN	1C.35	UNPKBL	35	FBNE
17.022	CPYSE	1C.36	PKWB	36	FBGE
17.024	MT_FPCR	1C.37	PKLB	37	FBGT
17.025	MF_FPCR	1C.38	MINSB8	38	BLBC
17.02A	FCMOVEQ	1C.39	MINSW4	39	BEQ
17.02B	FCMOVNE	1C.3A	MINUB8	3A	BLT
17.02C	FCMOVLT	1C.3B	MINUW4	3B	BLE
17.02D	FCMOVGE	1C.3C	MAXUB8	3C	BLBS
17.02E	FCMOVLE	1C.3D	MAXUW4	3D	BNE
17.02F	FCMOVGT	1C.3E	MAXSB8	3E	BGE
17.030	CVTQL	1C.3F	MAXSW4	3F	BGT
17.130	CVTQL/V	1C.70	FTOIT		
17.530	CVTQL/SV	1C.78	FTOIS		
18.0000	TRAPB	1D	PAL1D		
18.0400	EXCB	1E	PAL1E		