|  |  |  |  |  |  |  |  |  |  |
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| ADD/SUB | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| ADD[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 2669 | Rc | ADD Rt,Ra,Rb |
| ADDC[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 109 | Rc |  |
| ADDE[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 1389 | Rc |  |
| ADDME[o][.] | 31 | | Rt5 | Ra5 | ~ | Oe | 2349 | Rc |  |
| ADDZE[o][.] | 31 | | Rt5 | Ra5 | ~ | Oe | 2029 | Rc |  |
| SUBFME[o][.] | 31 | | Rt5 | Ra5 | ~ | Oe | 2329 | Rc |  |
| SUBFZE[o][.] | 31 | | Rt5 | Ra5 | ~ | Oe | 2009 | Rc |  |
| SUBF[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 409 | Rc |  |
| SUBFC[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 89 | Rc |  |
| SUBFE[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 1369 | Rc |  |
| ADDI | 14 | | Rt5 | Ra5 | Immediate16 | | | |  |
| ADDIC | 12 | | Rt5 | Ra5 | Immediate16 | | | |  |
| ADDIC. | 13 | | Rt5 | Ra5 | Immediate16 | | | |  |
| ADDIS | 15 | | Rt5 | Ra5 | Immediate16 | | | |  |
| SUBFIC | 8 | | Rt5 | Ra5 | Immediate16 | | | |  |

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| CMP | |  | | | | | |  |  |  |  |
|  | 31 26 | | 2523 | 22 | 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| CMP | 31 | | BF3 | ~ | 0 | Ra5 | Rb5 | 010 | | ~ |  |
| CMPL | 31 | | BF3 | ~ | 0 | Ra5 | Rb5 | 3210 | | ~ |  |
| CMPD | 31 | | BF3 | ~ | 1 | Ra5 | Rb5 | 010 | | ~ |  |
| CMPLD | 31 | | BF3 | ~ | 1 | Ra5 | Rb5 | 3210 | | ~ |  |
| CMPI | 11 | | BF3 | ~ | 0 | Ra5 | Signed Immediate16 | | | |  |
| CMPLI | 10 | | BF3 | ~ | 0 | Ra5 | Unsigned Immediate16 | | | |  |
| CMPDI | 11 | | BF3 | ~ | 1 | Ra5 | Signed Immediate16 | | | |  |
| CMPLDI | 10 | | BF3 | ~ | 1 | Ra5 | Unsigned Immediate16 | | | |  |

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| LOGIC | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| AND[.] | 31 | | Rt5 | Ra5 | Rb5 | 2810 | | Rc |  |
| ANDC[.] | 31 | | Rt5 | Ra5 | Rb5 | 6010 | | Rc |  |
| NAND[.] | 31 | | Rt5 | Ra5 | Rb5 | 47610 | | Rc |  |
| NOR[.] | 31 | | Rt5 | Ra5 | Rb5 | 12410 | | Rc |  |
| OR[.] | 31 | | Rt5 | Ra5 | Rb5 | 44410 | | Rc |  |
| ORC[.] | 31 | | Rt5 | Ra5 | Rb5 | 41210 | | Rc |  |
| XOR[.] | 31 | | Rt5 | Ra5 | Rb5 | 31610 | | Rc |  |
| ANDI | 28 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |
| ANDIS | 29 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |
| ORI | 24 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |
| ORIS | 25 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |
| XORI | 26 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |
| XORIS | 27 | | Rt5 | Ra5 | Unsigned Immediate16 | | | |  |

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| SHIFT | |  | | | |  |  | |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | 0 |  |
| SLD[.] | 31 | | Rt5 | Ra5 | Rb5 | 2710 | | | Rc |  |
| SLW[.] | 31 | | Rt5 | Ra5 | Rb5 | 2410 | | | Rc |  |
| SRD[.] | 31 | | Rt5 | Ra5 | Rb5 | 53910 | | | Rc |  |
| SRW[.] | 31 | | Rt5 | Ra5 | Rb5 | 53610 | | | Rc |  |
| SRAD[.] | 31 | | Rt5 | Ra5 | Rb5 | 79410 | | | Rc |  |
| SRAW[.] | 31 | | Rt5 | Ra5 | Rb5 | 79210 | | | Rc |  |
| SRADI[.] | 31 | | Rt5 | Ra5 | N5 | 4139 | | N | Rc |  |
| SRAWI[.] | 31 | | Rt5 | Ra5 | N5 | 82410 | | | Rc |  |

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| RLxxx | |  | | | |  |  | | | |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | | | 0 |  |
| RLDCL[.] | 30 | | Rt5 | Ra5 | Rb5 | mb | |  | 84 | | Rc |  |
| RLDCR[.] | 30 | | Rt5 | Ra5 | Rb5 | mb | |  | 94 | | Rc |  |
| RLDIC[.] | 30 | | Rt5 | Ra5 | sh | mb | |  | 23 | sh | Rc |  |
| RLDICL[.] | 30 | | Rt5 | Ra5 | sh | mb | |  | 03 | sh | Rc |  |
| RLDICR[.] | 30 | | Rt5 | Ra5 | sh | mb | |  | 13 | sh | Rc |  |
| RLDIMI[.] | 30 | | Rt5 | Ra5 | sh | mb | |  | 33 | sh | Rc |  |
| RLWIMI[.] | 20 | | Rt5 | Ra5 | sh | mb | |  | me4 | | Rc |  |
| RLWINM[.] | 21 | | Rt5 | Ra5 | sh | mb | |  | me4 | | Rc |  |
| RLWNM[.] | 23 | | Rt5 | Ra5 | sh | mb | |  | me4 | | Rc |  |

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| B[L] | |  | | | |  | |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | | 1 | 0 |  |
| B[L] | 18 | | Li24 | | | | | AA | LK |  |
| BC[L][A] | 16 | | BO5 | BI5 | BD14 | | | AA | LK |  |
| BCCTR[L] | 19 | | BO5 | BI5 | ~5 | | 52810 | | LK |  |
| BCLR[L] | 19 | | BO5 | BI5 | ~5 | | 1610 | | LK |  |

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| CNTLZ | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| CNTLZW[.] | 31 | | Rt5 | Ra5 | ~5 | 2610 | | Rc |  |
| CNTLZD[.] | 31 | | Rt5 | Ra5 | ~5 | 5810 | | Rc |  |

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| Cr | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| CRAND | 19 | | Bt5 | Ba5 | Bb5 | 25710 | | ~ |  |
| CRANDC | 19 | | Bt5 | Ba5 | Bb5 | 12910 | | ~ |  |
| CREQV | 19 | | Bt5 | Ba5 | Bb5 | 28910 | | ~ |  |
| CRNAND | 19 | | Bt5 | Ba5 | Bb5 | 22510 | | ~ |  |
| CRNOR | 19 | | Bt5 | Ba5 | Bb5 | 3310 | | ~ |  |
| CROR | 19 | | Bt5 | Ba5 | Bb5 | 44910 | | ~ |  |
| CROR | 19 | | Bt5 | Ba5 | Bb5 | 41710 | | ~ |  |
| CRXOR | 19 | | Bt5 | Ba5 | Bb5 | 19310 | | ~ |  |

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| DIV | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| DIVD[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 4899 | Rc |  |
| DIVDU[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 4579 | Rc |  |
| DIVW[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 4919 | Rc |  |
| DIVWU[o][.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 4599 | Rc |  |

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| EQV (XNOR) | |  | | |  |  |  |  |
|  | 31 26 | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| EQV[.] | 31 | Rt5 | Ra5 | Rb5 | 28410 | | Rc |  |

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| EXTxx | |  | | |  |  |  |  |
|  | 31 26 | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| EXTSB[.] | 31 | Rt5 | Ra5 | ~5 | 95410 | | Rc |  |
| EXTSH[.] | 31 | Rt5 | Ra5 | ~5 | 92210 | | Rc |  |
| EXTSW[.] | 31 | Rt5 | Ra5 | ~5 | 98610 | | Rc |  |

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|  | 31 26 | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| FABS[.] | 63 | Frt5 | ~5 | Fra5 | 26410 | | Rc |  |
| FNABS[.] | 63 | Frt5 | ~5 | Fra5 | 13610 | | Rc |  |
| FNEG[.] | 63 | Frt5 | ~5 | Fra5 | 4010 | | Rc |  |
| FCIFD[.] | 63 | Frt5 | ~5 | Fra5 | 84610 | | Rc |  |
| FCTID[.] | 63 | Frt5 | ~5 | Fra5 | 81410 | | Rc |  |
| FCTIDZ[.] | 63 | Frt5 | ~5 | Fra5 | 81510 | | Rc |  |
| FCTIW[.] | 63 | Frt5 | ~5 | Fra5 | 1410 | | Rc |  |
| FCTIWZ[.] | 63 | Frt5 | ~5 | Fra5 | 1510 | | Rc |  |
| FMR[.] | 63 | Frt5 | ~5 | Fra5 | 7210 | | Rc |  |
| FRSP[.] | 63 | Frt5 | ~5 | Fra5 | 1210 | | Rc |  |

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|  | 31 26 | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | 0 |  |
| FADD[.] | 63 | Frt5 | Fra5 | Frb5 | ~5 | | 215 | Rc |  |
| FADDS[.] | 59 | Frt5 | Fra5 | Frb5 | ~5 | | 215 | Rc |  |
| FSUB[.] | 63 | Frt5 | Fra5 | Frb5 | ~5 | | 205 | Rc |  |
| FSUBS[.] | 59 | Frt5 | Fra5 | Frb5 | ~5 | | 205 | Rc |  |
| FDIV[.] | 63 | Frt5 | Fra5 | Frb5 | ~5 | | 185 | Rc |  |
| FDIV[.] | 59 | Frt5 | Fra5 | Frb5 | ~5 | | 185 | Rc |  |
| FMADD[.] | 63 | Frt5 | Fra5 | Frb5 | Frc5 | | 295 | Rc |  |
| FMADDS[.] | 59 | Frt5 | Fra5 | Frb5 | Frc5 | | 295 | Rc |  |
| FNMADD[.] | 63 | Frt5 | Fra5 | Frb5 | Frc5 | | 315 | Rc |  |
| FNMADDS[.] | 59 | Frt5 | Fra5 | Frb5 | Frc5 | | 315 | Rc |  |
| FMSUB[.] | 63 | Frt5 | Fra5 | Frb5 | Frc5 | | 285 | Rc |  |
| FMSUBS[.] | 59 | Frt5 | Fra5 | Frb5 | Frc5 | | 285 | Rc |  |
| FNMSUB[.] | 63 | Frt5 | Fra5 | Frb5 | Frc5 | | 305 | Rc |  |
| FNMSUBS[.] | 59 | Frt5 | Fra5 | Frb5 | Frc5 | | 305 | Rc |  |
| FSEL[.] | 63 | Frt5 | Fra5 | Frb5 | Frc5 | | 235 | Rc |  |
| FMUL[.] | 63 | Frt5 | Fra5 | ~5 | Frc5 | | 255 | Rc |  |
| FMULS[.] | 59 | Frt5 | Fra5 | ~5 | Frc5 | | 255 | Rc |  |

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|  | 31 26 | 25 21 | | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| FCMPO[.] | 63 | Bf3 | ~2 | Fra5 | Frb5 | 3210 | | ~ |  |
| FCMPU[.] | 63 | Bf3 | ~2 | Fra5 | Frb5 | 010 | | ~ |  |

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|  | 31 26 | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | 0 |  |
| FRES[.] | 59 | Frt5 | ~5 | Fra5 | ~5 | | 245 | Rc |  |
| FRSQRTE[.] | 63 | Frt5 | ~5 | Fra5 | ~5 | | 265 | Rc |  |
| FSQRT[.] | 63 | Frt5 | ~5 | Fra5 | ~5 | | 225 | Rc |  |
| FSQRTS[.] | 59 | Frt5 | ~5 | Fra5 | ~5 | | 225 | Rc |  |

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| Lxx | |  | | | |  |  | |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | 0 |  |
| LBZUX | 31 | | Rt5 | Ra5 | Rb5 | 11910 | | | ~ |  |
| LBZX | 31 | | Rt5 | Ra5 | Rb5 | 8710 | | | ~ |  |
| LDARX | 31 | | Rt5 | Ra5 | Rb5 | 8410 | | | ~ |  |
| LWARX | 31 | | Rt5 | Ra5 | Rb5 | 2010 | | | ~ |  |
| LDUX | 31 | | Rt5 | Ra5 | Rb5 | 5310 | | | ~ |  |
| LDX | 31 | | Rt5 | Ra5 | Rb5 | 2110 | | | ~ |  |
| LFDUX | 31 | | Frt5 | Ra5 | Rb5 | 63110 | | | ~ |  |
| LFDX | 31 | | Frt5 | Ra5 | Rb5 | 59910 | | | ~ |  |
| LFSUX | 31 | | Frt5 | Ra5 | Rb5 | 56710 | | | ~ |  |
| LFSX | 31 | | Frt5 | Ra5 | Rb5 | 53510 | | | ~ |  |
| LHAUX | 31 | | Rt5 | Ra5 | Rb5 | 37510 | | | ~ |  |
| LHAX | 31 | | Rt5 | Ra5 | Rb5 | 34310 | | | ~ |  |
| LHBRX | 31 | | Rt5 | Ra5 | Rb5 | 79010 | | | ~ |  |
| LHZUX | 31 | | Rt5 | Ra5 | Rb5 | 31110 | | | ~ |  |
| LHZX | 31 | | Rt5 | Ra5 | Rb5 | 27910 | | | ~ |  |
| LSW | 31 | | Rt5 | Ra5 | N5 | 59710 | | | ~ |  |
| LWAUX | 31 | | Rt5 | Ra5 | Rb5 | 37310 | | | ~ |  |
| LWAX | 31 | | Rt5 | Ra5 | Rb5 | 34110 | | | ~ |  |
| LWBRX | 31 | | Rt5 | Ra5 | Rb5 | 53410 | | | ~ |  |
| LWZUX | 31 | | Rt5 | Ra5 | Rb5 | 5510 | | | ~ |  |
| LWZX | 31 | | Rt5 | Ra5 | Rb5 | 2310 | | | ~ |  |
| STBUX | 31 | | Rs5 | Ra5 | Rb5 | 24710 | | | ~ |  |
| STBX | 31 | | Rs5 | Ra5 | Rb5 | 21510 | | | ~ |  |
| STDUX | 31 | | Rs5 | Ra5 | Rb5 | 18110 | | | ~ |  |
| STDX | 31 | | Rs5 | Ra5 | Rb5 | 14910 | | | ~ |  |
| STWX | 31 | | Rs5 | Ra5 | Rb5 | 15110 | | | ~ |  |
| STWUX | 31 | | Rs5 | Ra5 | Rb5 | 18310 | | | ~ |  |
| STFDUX | 31 | | Frs5 | Ra5 | Rb5 | 75910 | | | ~ |  |
| STFDX | 31 | | Frs5 | Ra5 | Rb5 | 72710 | | | ~ |  |
| STFIWX | 31 | | Frs5 | Ra5 | Rb5 | 98310 | | | ~ |  |
| STFSUX | 31 | | Frs5 | Ra5 | Rb5 | 69510 | | | ~ |  |
| STFSX | 31 | | Frs5 | Ra5 | Rb5 | 66310 | | | ~ |  |
| STHBRX | 31 | | Frs5 | Ra5 | Rb5 | 91810 | | | ~ |  |
| STWBRX | 31 | | Frs5 | Ra5 | Rb5 | 66210 | | | ~ |  |
| STHUX | 31 | | Frs5 | Ra5 | Rb5 | 43910 | | | ~ |  |
| STHX | 31 | | Frs5 | Ra5 | Rb5 | 40710 | | | ~ |  |
| STDCX. | 31 | | Rs5 | Ra5 | Rb5 | 21410 | | | 1 |  |
| STWCX | 31 | | Rs5 | Ra5 | Rb5 | 15010 | | | 1 |  |
| LBZ | 34 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LBZU | 35 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LD | 58 | | Rt5 | Ra5 | Signed Immediate14 | | | 02 | |  |
| LDU | 58 | | Rt5 | Ra5 | Signed Immediate14 | | | 12 | |  |
| LWA | 58 | | Rt5 | Ra5 | Signed Immediate14 | | | 22 | |  |
| STD | 62 | | Rs5 | Ra5 | Signed Immediate14 | | | 02 | |  |
| STDU | 62 | | Rs5 | Ra5 | Signed Immediate14 | | | 12 | |  |
| LFD | 50 | | Frt5 | Ra5 | Signed Immediate16 | | | | |  |
| LFDU | 51 | | Frt5 | Ra5 | Signed Immediate16 | | | | |  |
| LFS | 48 | | Frt5 | Ra5 | Signed Immediate16 | | | | |  |
| LFSU | 49 | | Frt5 | Ra5 | Signed Immediate16 | | | | |  |
| LHZ | 40 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LHZU | 41 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LHA | 42 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LHAU | 43 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LMW | 46 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| SMW | 47 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| LWZ | 32 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| LWZU | 33 | | Rt5 | Ra5 | Signed Immediate16 | | | | |  |
| STB | 38 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| STBU | 39 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| STH | 44 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| STHU | 45 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| STFD | 54 | | Frs5 | Ra5 | Signed Immediate16 | | | | |  |
| STFDU | 55 | | Frs5 | Ra5 | Signed Immediate16 | | | | |  |
| STFS | 52 | | Frs5 | Ra5 | Signed Immediate16 | | | | |  |
| STFSU | 53 | | Frs5 | Ra5 | Signed Immediate16 | | | | |  |
| STW | 36 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |
| STWU | 37 | | Rs5 | Ra5 | Signed Immediate16 | | | | |  |

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|  | 31 26 | 25 21 | | 20 16 | | 15 11 | 10 | 9 1 | 0 |  |
| MCRF | 19 | Bf3 | ~2 | BFa3 | ~2 | ~5 | 010 | | ~ |  |
| MCRFS | 63 | Bf3 | ~2 | BFa3 | ~2 | ~5 | 6410 | | ~ |  |
| MCRXR | 31 | Bf3 | ~2 | ~3 | ~2 | ~5 | 51210 | | ~ |  |

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|  | 31 26 | | 25 21 | | | 20 16 | | | | 15 11 | | | | 10 | 9 1 | 0 |  |
| MFCR | 31 | | Rt5 | | | ~5 | | | | ~5 | | | | 1910 | | ~ |  |
| MFMSR | 31 | | Rt5 | | | ~5 | | | | ~5 | | | | 8310 | | ~ |  |
| MTMSR | 31 | | Ra5 | | | ~5 | | | | ~5 | | | | 14610 | | ~ |  |
| MFCTR | 31 | | Rt5 | | | 28810 | | | | | | | | 33910 | | ~ |  |
| MTCTR | 31 | | Ra5 | | | 28810 | | | | | | | | 46710 | | ~ |  |
| MFLR | 31 | | Rt5 | | | 25610 | | | | | | | | 33910 | | ~ |  |
| MTLR | 31 | | Ra5 | | | 25610 | | | | | | | | 46710 | | ~ |  |
| MFSPR | 31 | | Rt5 | | | spr10 | | | | | | | | 33910 | | ~ |  |
| MTSPR | 31 | | Ra5 | | | spr10 | | | | | | | | 46710 | | ~ |  |
| MFXER | 31 | | Rt5 | | | 3210 | | | | | | | | 33910 | | ~ |  |
| MTXER | 31 | | Ra5 | | | 3210 | | | | | | | | 46710 | | ~ |  |
| MFTB | 31 | | Rt5 | | | tbr10 | | | | | | | | 37110 | | ~ |  |
| MFTB | 31 | | Rt5 | | | 39210 | | | | | | | | 37110 | | ~ |  |
| MFTBU | 31 | | Rt5 | | | 42410 | | | | | | | | 37110 | | ~ |  |
| MFFS[.] | 63 | | Frt5 | | | ~5 | | | | ~5 | | | | 58310 | | Rc |  |
| MFSR | 31 | | Rt5 | | | ~ | | Sa4 | | ~5 | | | | 59510 | | ~ |  |
| MTSR | 31 | | Ra5 | | | ~ | | St4 | | ~5 | | | | 21010 | | ~ |  |
| MFSRI | 31 | | Rt5 | | | ~ | | ~4 | | Rb5 | | | | 65910 | | ~ |  |
| MTSRIN | 31 | | Ra5 | | | ~ | | ~4 | | Rt5 | | | | 24210 | | ~ |  |
| MTCRF | 31 | | Ra5 | | | ~ | | FXM8 | | | | ~ | | 14410 | | ~ |  |
| MTFSB0[.] | 63 | | Bt5 | | | ~5 | | | | | ~5 | | | 7010 | | Rc |  |
| MTFSB1[.] | 63 | | Bt5 | | | ~5 | | | | | ~5 | | | 3810 | | Rc |  |
| MTFSF[.] | 63 | | ~ | FLM8 | | | | | ~ | | Fra5 | | | 71110 | | Rc |  |
| MTFSFI[.] | 63 | | Bf3 | | ~ | | ~5 | | | | U4 | | ~ | 13410 | | Rc |  |

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| MUL | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| MULHD[.] | 31 | | Rt5 | Ra5 | Rb5 | ~ | 739 | Rc |  |
| MULHDU[.] | 31 | | Rt5 | Ra5 | Rb5 | ~ | 99 | Rc |  |
| MULHW[.] | 31 | | Rt5 | Ra5 | Rb5 | ~ | 759 | Rc |  |
| MULHWU[.] | 31 | | Rt5 | Ra5 | Rb5 | ~ | 119 | Rc |  |
| MULLI | 7 | | Rt5 | Ra5 | Signed Immediate16 | | | |  |
| MULLD[.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 2339 | Rc |  |
| MULLW[.] | 31 | | Rt5 | Ra5 | Rb5 | Oe | 2359 | Rc |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NEG | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| NEG[O][.] | 31 | | Rt5 | Ra5 | ~5 | Oe | 1049 | Rc |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RFI | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| RFI | 19 | | ~5 | ~5 | ~5 | 5010 | | ~ |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SC | |  | | | |  |  | |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | | 0 |  |
| SC | 17 | | ~5 | ~5 | ~5 | ~9 | | 11 | ~ |  |
| SYNC | 31 | | ~5 | ~5 | ~5 | 59810 | | | ~ |  |
| TD | 31 | | TO5 | Ra5 | Rb5 | 6810 | | | ~ |  |
| TW | 31 | | TO5 | Ra5 | Rb5 | 410 | | | ~ |  |
| TDI | 2 | | TO5 | Ra5 | Signed Immediate16 | | | | |  |
| TWI | 3 | | TO5 | Ra5 | Signed Immediate16 | | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TLB | |  | | | |  |  |  |  |
|  | 31 26 | | 25 21 | 20 16 | 15 11 | 10 | 9 1 | 0 |  |
| TLBIA | 31 | | ~5 | ~5 | ~5 | 37010 | | ~ |  |
| TLBIE | 31 | | ~5 | ~5 | Ra5 | 30610 | | ~ |  |
| TLBSYNC | 31 | | ~5 | ~5 | ~5 | 56610 | | ~ |  |