



APPENDIX C REGISTER DIAGRAM INDEX

–B–

BAR (breakpoint address register) 21-46
BBCMCR (BBC module configuration register) 4-24
BR0 (BR3 - memory controller base registers 0 - 3) 10-28

–C–

CANCTRL0 (control register 0) 16-25
CANCTRL1 (control register 1) 16-26
CANCTRL2 (control register 2) 16-28
CANICR (TouCAN interrupt configuration register) 16-24
CANMCR (TouCAN module configuration register) 16-22
CCW (conversion command word table) 13-46
CFSR0 (TPU3 channel function select register 0) 17-16
CFSR1 (TPU3 channel function select register 1) 17-16
CFSR2 (TPU3 channel function select register 2) 17-16
CFSR3 (TPU3 channel function select register 3) 17-16
CIER (TPU3 channel interrupt enable register) 17-15
CISR (TPU3 channel interrupt status register) 17-19
CMFCFIG (hard reset configuration word) 19-17
CMFCTL (CMF EEPROM high voltage control register) 19-7, 19-9
CMFMCR (CMF EEPROM configuration register) 19-5
CMPA-CMPD (comparator A-D value register) 21-45
CMPE-CMPF (comparator E-F value registers) 21-46
CMPG-CMPH (comparator G-H value registers) 21-46
COLIR (change of lock interrupt register) 8-35
COUNTA (breakpoint counter A value and control register) 21-52
COUNTB (breakpoint counter B value and control register) 21-53
CPR0 (TPU3 channel priority register 0) 17-18
CPR1 (TPU3 channel priority register 1) 17-18
CR (condition register) 3-16
CTR (count register) 3-19

–D–

DAR (data address register) 3-22
DDRQA (port QA data direction register) 13-35
DDRQS (PORTQS data direction register) 14-12
DEC (decrementer register) 3-24, 6-28
DER (debug enable register) 21-55
DMBR (dual mapping base register) 10-31
DMOR (dual mapping option register) 10-32
DPTMCR (DPTRAM module configuration register) 18-4
DSCR (TPU3 development support control register) 17-12
DSISR (dae/source instruction service register) 3-22
DSSR (TPU3 development support status register) 17-14

–E–

ECR (exception cause register) 21-54
EMCR (external master control register) 6-22
ESTAT (error and status register) 16-30



-F-

FPRs - (floating-point registers) 3-12
FPSCR (floating-point status and control register) 3-13

-G-

GPRs (general-purpose registers) 3-12

-H-

HSQR0 (TPU3 host sequence register 0) 17-17
HSQR1 (TPU3 host sequence register 1) 17-17
HSSR0 (TPU3 host service request register 0) 17-17
HSSR1 (TPU3 host service request register 1) 17-18

-I-

ICTRL (i-bus support control register) 21-47
IFLAG (interrupt flag register) 16-33
IMASK (interrupt mask register) 16-32
IMMR (internal memory mapping register) 6-21

-L-

L2U_GRA (L2U global region attribute register) 11-16
L2U_MCR (L2U module configuration register) 11-13
L2U_RAx (L2U region X attribute register) 11-15
L2U_RBAx (L2U region x base address register) 11-14
LCTRL1 (I-bus support control register 1) 21-49
LCTRL2 (I-bus support control register 2) 21-50
LJSRR (left justified, signed result register) 13-49
LJURR (left justified, unsigned result register) 13-50
LR (link register) 3-18

-M-

MCPSMSCR (MCPSM status/control register) 15-13
MDASMAR (MDASM data A register) 15-21
MDASMBR (MDASM data B register) 15-22
MDASMSCR (MDASM status/control register) 15-23
MDASMSCRD (MDASM status/control register - duplicated) 15-22
MI_GRA (global region attribute register) 4-23
MIOS1ER0 (MIRSM0 interrupt enable register) 15-35
MIOS1ER1 (interrupt enable register) 15-37
MIOS1LVL0 (MIOS1 interrupt level register 0) 15-11
MIOS1LVL1 (MIOS1 interrupt level 1 register) 15-11
MIOS1MCR (MIOS1 module configuration register) 15-9
MIOS1RPR0 (MIRSM0 request pending register) 15-35
MIOS1RPR1 (MIRSM1 request pending register) 15-38
MIOS1SR0 (MIRSM0 interrupt status register) 15-34
MIOS1SR1 (MIRSM1 interrupt status register) 15-36
MIOS1TPCR (test and pin control register) 15-8
MIOS1VNR (MIOS1 module/version number register) 15-9
MISCNT (MISC counter) 18-6
MISRH (multiple input signature register high) 18-5
MISRL (multiple input signature register low) 18-6
MMCSMCNT (MMCSM up-counter register) 15-16
MMCSMML (MMCSM modulus latch register) 15-16
MMCSMSCR (MMCSM status/control register) 15-17
MMCSMSCRD (MMCSM status/control register - duplicated) 15-17
MPIOSMDDR (MPIOSM data direction register) 15-31
MPIOSMDR (MPIOSM data register) 15-31



MPWMSMCNTR (MPWMSM counter register) 15-28
MPWMSMPERR (MPWMSM period register) 15-27
MPWMSMPULR (MPWMSM pulse width register) 15-27
MPWMSMSCR (MPWMSM status/control register) 15-28
MSR (machine state register) 3-20
MSTAT (memory controller status register) 10-28

—O—

OR0 (OR3 - memory controller option registers 0 - 3) 10-30

—P—

PDMCR (Pad module configuration register) 2-29
PISCR (periodic interrupt status and control register) 6-32
PITC (periodic interrupt timer count) 6-32
PITR (periodic interrupt timer register) 6-33
PLPRCR (PLL, low power, and reset control register) 8-33
PORTQA (port QA data register) 13-34
PORTQB (port QB data register) 13-34
PORTQS (port QS data register) 14-11
PQSPAR (PORTQS pin assignment register) 14-11
PRESDIV (prescaler divide register) 16-27
PVR (processor version register) 3-25

—Q—

QACR0 (QADC64 control register 0) 13-35
QACR1 (QADC64 control register 1) 13-36
QACR2 (QADC64 control register 2) 13-39
QADC64INT (QADC64 interrupt register) 13-33
QADC64MCR (QADC64 module configuration register) 13-33
QASR0 (QADC64 status register 0) 13-41, 13-42
QDSCI_IL (QSM2 dual SCI interrupt level register) 14-8
QSCI1CR (QSCI1 control register) 14-59
QSCI1SR (QSCI1 status register) 14-61
QSMCMCR (QSMCM module configuration register) 14-7
QSPI_IL (QSPI interrupt level register) 14-9

—R—

RAMBAR (ram array base address register) 18-5
Regionattribute registers (0 - 3) 4-21
RJURR (right justified, unsigned result register) 13-49
RSR (reset status register) 7-5
RTC (real time clock) 6-31
RTCAL (real time clock alarm) 6-31
RTCS (real time clock status and control register) 6-30
RXECTR (receive error counter) 16-33
RXGMSKHI (receive global mask register high) 16-29

—S—

SCCR (system clock control register) 8-30
SCCxR0 (QSMCM SCI control register 0) 14-45
SCCxR1 (QSMCM SCI control register 1) 14-46
SCDR (QSMCM SCI data register) 14-49
SCxSR (QSMCM SCIx status register) 14-47
SGPIOCR (SGPIO control register) 6-35
SGPIODT1 (SGPIO data register 1) 6-34
SGPIODT2 (SGPIO data register 2) 6-34
SIEL (SIU interrupt edge level register) 6-25
SIMASK (SIU interrupt mask register) 6-24



SIPEND (SIU interrupt pending register) 6-24
SIUMCR (SIU module configuration register) 6-18
SIVVEC (SIU interrupt vector) 6-25
SPCR0 (QSPI control register 0) 14-16
SPCR1 (QSPI control register 1) 14-18
SPCR2 (QSPI control register 2) 14-19
SPCR3 (QSPI control register) 14-19
SPRG0-SPRG3 (general special-purpose registers 0-3) 3-25
SPSR (QSPI status register) 14-20
SRAMMCR (SRAM module configuration register) 20-3
SRR0 (machine status save/restore register 0) 3-24
SRR1 (machine status save/restore register 1) 3-25
SWSR (software service register) 6-27
SYPCR (system protection control register) 6-26

–T–

TB (time base) 3-19, 3-23, 6-29
TBREF0 (time base reference register 0) 6-29
TBREF1 (time base reference register 1) 6-29
TBSCR (time base control and status register) 6-30
TESR (transfer error status register) 6-27
TICR (TPU3 interrupt configuration register) 17-14
TIMER (free running timer register) 16-29
TPUMCR (TPU3 module configuration register) 17-10
TPUMCR2 (TPU3 module configuration register 2) 17-20
TPUMCR3 (TPU3 module configuration register 3) 17-21

–U–

UIPEND (UIMB pending interrupt request register) 12-8
UMCR (UIMB module configuration register) 12-7

–V–

VSRMSR (VDDSRM control register) 8-36

–X–

XER (integer exception register) 3-17