

5.3.1 Power-fail comparator. . . . .	69
5.4 CLOCK — Clock control. . . . .	70
5.4.1 HFCLK controller. . . . .	71
5.4.2 LFCLK controller. . . . .	72
5.4.3 Registers. . . . .	73
5.5 OSCILLATORS — Oscillator control. . . . .	86
5.5.1 High-frequency (32 MHz) crystal oscillator (HFXO). . . . .	86
5.5.2 Low-frequency (32.768 kHz) crystal oscillator (LFXO). . . . .	88
5.5.3 CPU clock frequency selection. . . . .	90
5.5.4 Registers. . . . .	90
5.6 POWER — Power control. . . . .	92
5.6.1 Registers. . . . .	93
5.7 REGULATORS — Regulator control. . . . .	97
5.7.1 VREGMAIN — Main regulator. . . . .	98
5.7.2 Registers. . . . .	98
5.8 RESET — Reset control. . . . .	101
5.8.1 Power-on reset. . . . .	102
5.8.2 Pin reset. . . . .	102
5.8.3 Brownout reset. . . . .	102
5.8.4 Glitch detector. . . . .	102
5.8.5 Wakeup from System OFF mode reset. . . . .	102
5.8.6 Soft reset. . . . .	102
5.8.7 CTRL-AP resets. . . . .	102
5.8.8 Watchdog timer reset. . . . .	103
5.8.9 Retained registers. . . . .	103
5.8.10 Reset behavior. . . . .	103
5.8.11 Registers. . . . .	104
<b>6 Event system. . . . .</b>	<b>107</b>
6.1 DPPI latencies. . . . .	107
6.2 DPPI — Distributed programmable peripheral interconnect. . . . .	108
6.2.1 Channel publish and subscribe. . . . .	109
6.2.2 DPPI controller (DPPIC). . . . .	111
6.2.3 Connection examples. . . . .	111
6.2.4 Special considerations for a system implementing TrustZone for Cortex-M processors. . . . .	112
6.2.5 Split security. . . . .	113
6.2.6 Registers. . . . .	113
6.3 PPIB — PPI Bridge. . . . .	117
6.3.1 PPIB connections. . . . .	117
6.3.2 Handshake and overflow. . . . .	118
6.3.3 Connection examples. . . . .	118
6.3.4.1 Security. . . . .	119
6.3.5 Registers. . . . .	120
<b>7 Security. . . . .</b>	<b>123</b>
7.1 Memory and peripheral access permissions. . . . .	123
7.2 TrustZone security. . . . .	125
7.3 Immutable boot region. . . . .	128
7.4 Security attributes. . . . .	128
7.5 Security fault. . . . .	128
7.6 Peripherals with split security access. . . . .	129
7.6.1 CRACEN. . . . .	130
7.6.2 DPPIC. . . . .	130