

COMMAND NAME	COMMAND CODE	INPUT DATA	OUTPUT DATA	NOTES
READ EVENT DATA	00000xxx	–	Event data packet	<ul style="list-style-type: none"> OPERATING MODE: <ul style="list-style-type: none"> I = read out leakage current (1 = leakage, 0 = temperature, default is 0) S = self-trigger (1 = enabled, default is 0), A = acquisition mode (0 = zero suppression, 1 = full read-out, default is 0) SHAPER TIME CONSTANT: TTT = 3 bit time constant selection CSA REFERENCE REGULATION: <ul style="list-style-type: none"> H = test at room temperature (1 = enabled, default is 0) RRR = 3 bit reference regulation GLOBAL BIAS REGULATION: <ul style="list-style-type: none"> T = select temp. source (1 = ASIC, 0 = PCB default) BBB = 3 bit bias current reg. DISCRIMINATOR THRESHOLD: DDDDDDDD = 8 bit threshold FINE THRESHOLD ADJ.: FFF = 3 bit fine threshold adjustment (one for each channel)
READ SEU FLAGS/TEMPERATURE SENSOR	00001xxx	–	SEU & Temperature word	
READ OPERATING MODE	00010xxx	–	00000ISA	
READ SHAPER TIME CONSTANT	00011xxx	–	00000TTT	
READ CSA REFERENCE REGULATION	00100xxx	–	0000HRRR	
READ GLOBAL BIAS REGULATION	00101xxx	–	0000TBBB	
READ LEAKAGE CURRENT MASK	00111xxx	–	32 bit word	
READ DISCRIMINATOR ENABLE MASK	01000xxx	–	32 bit word	
READ CALIBRATION MASK	01001xxx	–	32 bit word	
READ DISCRIMINATOR THRESHOLD	01010xxx	–	DDDDDDDD	
READ FINE THRESHOLD ADJ. CH. # NNNNN	011NNNNN	–	00000FFF	
WRITE OPERATING MODE	10010ISA	–	–	
WRITE SHAPER TIME CONSTANT	10011TTT	–	–	
WRITE CSA REFERENCE REGULATION	10100xxx	0000HRRR	–	
WRITE GLOBAL BIAS REGULATION	10101xxx	0000TBBB	–	
SET CALIBRATION DAC VOLTAGE	10110xxx	16 bit word	–	
WRITE LEAKAGECURRENT MASK	10111xxx	32 bit word	–	
WRITE DISCRIMINATOR ENABLE MASK	11000xxx	32 bit word	–	
WRITE CALIBRATION MASK	11001xxx	32 bit word	–	
WRITE DISCRIMINATOR THRESHOLD	11010xxx	DDDDDDDD	–	
WRITE FINE THRESHOLD ADJ. CH. # NNNNN	111NNNNN	00000FFF	–	