

Robot Protection Board Datasheet

Absolute Maximum Ratings

Symbol	Parameter	Value	Unit
$V_{IN/OUT}$	DC Input Voltage	3.3	V
V_{PWR}	Input Voltage for the Board	25	V
I_{PWR}	Input Current for the Board	1	A
I_{OUT}	3.3V Header Output Current	750	mA
T_{STG}	Storage temperature range	-40 to 125	°C
T_{OP}	Operating Temperature range	0 to 85	°C

Other Ratings

Symbol	Parameter	Value	Unit
V_{PWR}	Minimum Input Voltage for the Board	25	V
I_{IN}	DC Input Current	150	mA
	Number of Input/Output Pins	16*	°C

*Note: Rev 0 boards have 15 pins without modification. **Do Not Use PIN B11 on Rev 0 Boards.** Rev 0.1 and Rev 1 boards have 16 input/output pins.

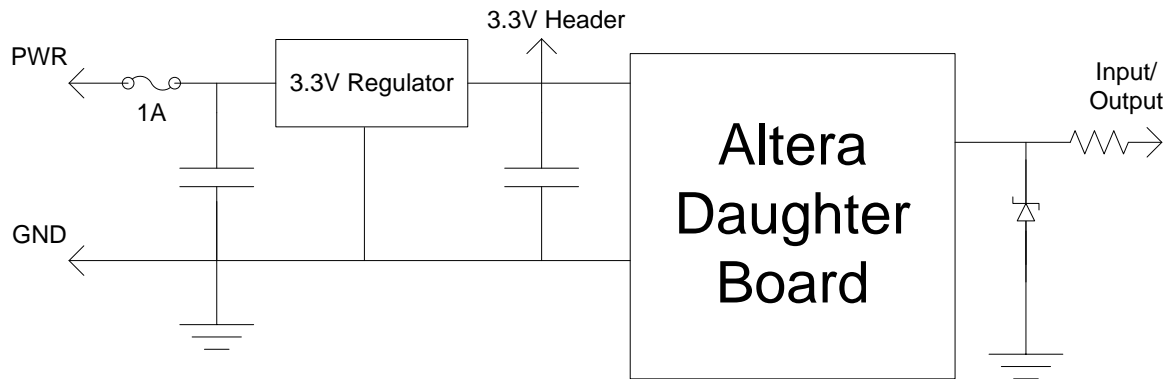
Niomite Board

Device: Altera Cyclone II FPGA EP2C8T144C7N
Logic Elements: 8256
Serial Flash: EPCS4 (4Mbit)
Clock frequency: 25MHz
JTAG and ASMI interfaces
Reset push-button Switch
512K x 8 bit (4Mbit) SRAM for Nios II program execution and dynamic data storage

Niomite and Altera Pins

Niomite Pin	Altera Pin	Niomite P	Altera Pin
G13	PIN_7	B4	PIN_76
G14	PIN_4	B3	PIN_75
G15	PIN_3	B2	PIN_74
H15	PIN_9	B1	PIN_73
B12	PIN_118	G3	PIN_58
B11	PIN_115	G4	PIN_57
B10	PIN_114	G5	PIN_55
B9	PIN_113	G6	PIN_53

Basic Board Schematic



Note: Only 1 Input/Output is shown

Physical Board Setup

