



Rugged MEGA with Ethernet Specifications Sheet

V1.2

SKU SQ8446853



Features

	Micro/Power Section
Microcontroller	Atmel ATmega2560
Internal DAC	10 bit 16 Channel 15ksps max resolution
Operating Voltage	5V with Precision Analog Reference
Crystals Used	CRYSTAL 16MHZ 8PF SMD CRYSTAL 25.0000MHZ 8PF SMD
Clock Speed	16 MHz
Power Supply Type	Linear
Input Voltage-Power Supply	3.5V-30V
Power Input	Barrell 2.1mm (ID) 5.5mm(OD) Micro USB Type B
	I/O
Total I/O Pin	70
Analog Input Pins	16 (can be converted to digital)
Analog Resolution	10 bits



I/O Pin Max Voltage	24V
Digital I/O pins	54
PWM Pins	14
I/O Pin Protection	Over/Under Voltage, Over/Under Current, Reverse Polarity
Memory	
Flash Memory	256 KB Flash Memory- bootloader uses 8 KB
EEPROM	6 KB EEPROM- 4KB on ATmega 2560 2 KB External EEPROM Microchip 24AA025E48T-I/OT
SRAM	8 KB SRAM
microSD	microSD card slot with SPI D4, D50, D51, D52
Serial/USB/Ethernet	
Serial	4-hardware USARTs, I2C, SPI
USB	ATmega 16U2 USB to Serial Converter
Ethernet	Wiznet W51001-10/100 LAN port D10, D50, D51, D52
Protective Features- NOT available on Standard Arduinos	
Protected Digital Pins	22
Protected Analog Pins	16
DC Current per I/O	20mA PTC Protected
DC Current for 3.3V Pin	300mA
Vin Reverse Voltage Protection	30V Max
Vin Current Protection	500mA resettable fuse
3.3 Output Pin Protection	30V
5V Output Pin Protection	30V
I/O Pin Protection	24V
Total Microcontroller Protection	150mA



USB Power ESD Protection	TVS Diode
Data Line Protection	TVS Diode
Operating Temperature	-10C to +85C

Dimensional Data

