

Arduino DUE R3 Board 3V



Features:

The Arduino Due R3 is the first Arduino board powered by a 32-bit ARM Cortex-M3 microcontroller, delivering high-performance processing at 84MHz. With 512KB of flash, 96KB SRAM, and a wide range of I/O interfaces including UART, SPI, DAC, and TWI, it is designed for demanding applications that require precision and speed. The board runs at 3.3V, ensuring compatibility with shields and sensors within this voltage range. Its integrated USB OTG support and JTAG interface make it suitable for advanced development, robotics, and control systems.

Specifications	
Microcontroller	AT91SAM3X8E
Operating Voltage	3.3V
Input Voltage (Recommended)	7V - 12V
Input Voltage (Limits)	6V - 16V
Digital I/O Pins	54 (12 PWM)
Analog Input Pins	12
Analog Output Pins (DAC)	2
Flash Memory	512KB
SRAM	96KB (64KB + 32KB)
Clock Speed	84MHz
Total DC Output Current	130mA
3.3V Pin Current	800mA
5V Pin Current	800mA
Usage	Advanced robotics, automation, and embedded systems

Product Pictures:





Pinouts:

DC Power Jack 7-12VDC Input
2.1mm x 5.5mm Male Center Positive

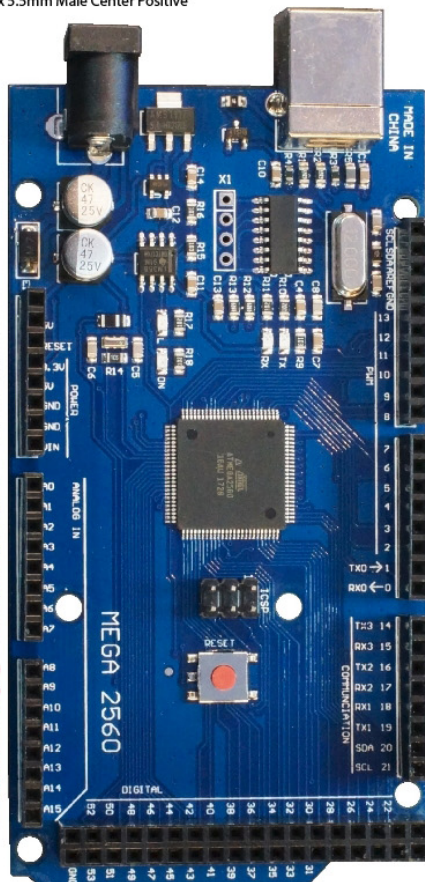
USB-B Port To Computer

Red numbers in parenthesis are the name to use when referencing that pin.
Analog pins are referenced as A0 thru A15 even when using as digital I/O

No Connection
I/O Reference Voltage for shields
Reset Input
3.3V Output @ 50mA
5V Output or Input
Ground
Ground
7-12V Output or Input

Analog Pin 0 / Digital Pin 54 (A0)
Analog Pin 1 / Digital Pin 55 (A1)
Analog Pin 2 / Digital Pin 56 (A2)
Analog Pin 3 / Digital Pin 57 (A3)
Analog Pin 4 / Digital Pin 58 (A4)
Analog Pin 5 / Digital Pin 59 (A5)
Analog Pin 6 / Digital Pin 60 (A6)
Analog Pin 7 / Digital Pin 61 (A7)

Analog Pin 8 / Digital Pin 62 (A8)
Analog Pin 9 / Digital Pin 63 (A9)
Analog Pin 10 / Digital Pin 64 (A10)
Analog Pin 11 / Digital Pin 65 (A11)
Analog Pin 12 / Digital Pin 66 (A12)
Analog Pin 13 / Digital Pin 67 (A13)
Analog Pin 14 / Digital Pin 68 (A14)
Analog Pin 15 / Digital Pin 69 (A15)



(I2C) SCL - Serial Clock
(I2C) SDA - Serial Data
Analog Reference Voltage
Ground
(13) Digital Pin 13 / PWM / Connected to on-board LED
(12) Digital Pin 12 / PWM
(11) Digital Pin 11 / PWM
(10) Digital Pin 10 / PWM
(9) Digital Pin 9 / PWM
(8) Digital Pin 8 / PWM

(7) Digital Pin 7 / PWM
(6) Digital Pin 6 / PWM
(5) Digital Pin 5 / PWM
(4) Digital Pin 4 / PWM
(3) Digital Pin 3 / PWM / Ext Int 5
(2) Digital Pin 2 / PWM / Ext Int 4
(1) Digital Pin 1 / Serial Port 0 TXD (Main Serial Port)
(0) Digital Pin 0 / Serial Port 0 RXD (Main Serial Port)

(14) Digital Pin 14 / Serial Port 3 TXD
(15) Digital Pin 15 / Serial Port 3 RXD
(16) Digital Pin 16 / Serial Port 2 TXD
(17) Digital Pin 17 / Serial Port 2 RXD
(18) Digital Pin 18 / Serial Port 1 TXD / Ext Int 3
(19) Digital Pin 19 / Serial Port 1 RXD / Ext Int 2
(20) Digital Pin 20 / (I2C) SDA / Ext Int 1
(21) Digital Pin 21 / (I2C) SCL / Ext Int 0

5V
Digital Pin 22 (22)
Digital Pin 24 (24)
Digital Pin 26 (26)
Digital Pin 28 (28)
Digital Pin 30 (30)
Digital Pin 32 (32)
Digital Pin 34 (34)
Digital Pin 36 (36)
Digital Pin 38 (38)
Digital Pin 40 (40)
Digital Pin 42 (42)
Digital Pin 44 (44)
Digital Pin 46 (46)
Digital Pin 48 (48)
Digital Pin 50 (50)
Digital Pin 52 (52)
GND
5V
(23) Digital Pin 23
(25) Digital Pin 25
(27) Digital Pin 27
(29) Digital Pin 29
(31) Digital Pin 31
(33) Digital Pin 33
(35) Digital Pin 35
(37) Digital Pin 37
(39) Digital Pin 39
(41) Digital Pin 41
(43) Digital Pin 43
(45) Digital Pin 45 / PWM
(47) Digital Pin 47
(49) Digital Pin 49
(51) Digital Pin 51 / (SPI) MOSI
(53) Digital Pin 53 / (SPI) SS
GND