GENIE C08 Microcontroller

Capabilities

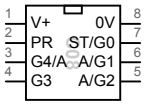
The following table outlines the capabilities of this GENIE device:

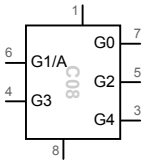
Type	**CORE**
Verssion	**1**
Signals	
Pins	**8**
Analogue inputs	**3**
ADC resolution	**8 bits**
Digital inputs	**1-4**
Digital outputs	**1-4**
Features	
Parallel processing	**Yes**
Plug and play	**Yes**
Debug live	**Yes**
Device control	**Yes**
Sensor calibration	**Yes**
Mono RTTTL music	**Yes**
Stereo RTTTL music	**Yes**
16 channel MIDI music	**No**
Sound effects	**No**
PWM outputs	**1**
Servo motor control	**0**
Infra-red control	**Yes**
1-Wire® and I2C	**No**
Ultrasonic sensing	**No**
Events and interrupts	**Yes**
1-second clock	**Yes**
Programming	
Memory	**256 bytes**
Variables	**10 (A-J)**
EEPROM locations	**16**
Program start limit	**2**
Subroutine limit	**No limit**
Call stack limit	**16**
Electrical	
PICmicro® device	**12F683**
Power supply	**2.1-5.5V**
Pin current limit	**25mA**
Total current limit	**90mA**

Component

Note: This is a older (v1) GENIE microcontroller, which has been replaced the the more powerful v2 GENIE 08 device.

The GENIE C08 microcontroller has 8 legs (known as pins) and these are used as follows (a simplified view is also shown):





Pin	Description
1	Power supply voltage (2.1-5.5V only)
2	Programming input (PR)
3	Analogue input A4 or digital in/out G4
4	Digital input G3
5	Analogue input A2 or digital in/out G2
6	Analogue input A1 or digital in/out G1
7	Digital output G0 and Status output (ST)
8	Ground (zero volt) supply voltage

The required circuit for a GENIE C08 is shown below. It includes a download socket and two resistors.