GENIE C14 Microcontroller

Capabilities

The following table outlines the capabilities of this GENIE device:

Type	CORE
Signals	
Pins	14
Analogue inputs	2
ADC resolution	8 bits
Digital inputs	5
Digital outputs	6
Features	
Parallel processing	Yes
Plug and play	Yes
Debug live	Yes
Device control	Yes
Sensor calibration	Yes
Polyphonic music	Yes
PWM output	1
Servo motor control	0
Infra-red control	Yes
Looping	Yes
Events	Yes
Interrupts	Yes
1-second clock	Yes
Programming	
Memory	160
Variables	10 (A-J)
EEPROM locations	16
Flowchart start limit	2
Subroutine limit	No limit
Call stack limit	16
Electrical	
PICmicro® device	16F684
Power supply	2.1-5.5V
Pin current limit	25mA
Total current limit	90mA

Component

The GENIE C14 microcontroller has 14 legs (known as pins) and these are used as follows (a simplified view is also shown):
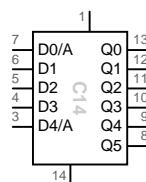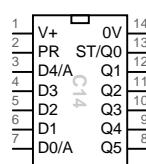
Pin	Description
1	Power supply voltage (2.1-5.5V only)
2	Programming input (PR)
3	Analogue input A4 or digital input D4
4	Digital input D3
5	Digital input D2
6	Digital input D1
7	Analogue input A0 or digital input D0
8	Digital output Q5
9	Digital output Q4
10	Digital output Q3
11	Digital output Q2
12	Digital output Q1
13	Digital output Q0 and Status output (ST)
14	Ground (zero volt) supply voltage

The required circuit for a GENIE C14 is shown below. It includes a download socket and two resistors.

NEW WAVE CONCEPTS