



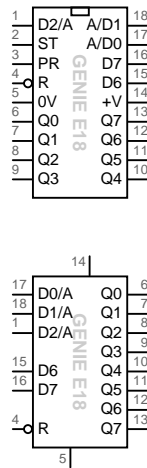
Capabilities

The following table outlines the capabilities of this GENIE device:

Type		ELITE
Signals		
Pins		18
Analogue inputs		3
ADC resolution		8 bits
Digital inputs		5
Digital outputs		9
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	8	
Infra-red control	Yes	
Looping	Yes	
Events	Yes	
Interrupts	Yes	
1-second clock	Yes	
Programming		
Memory	2200	
Variables	10 (A-J)	
EEPROM locations	16	
Flowchart start limit	4	
Subroutine limit	No limit	
Call stack limit	32	
Electrical		
PICmicro® device	16F88	
Power supply	2-5.5V	
Pin current limit	25mA	
Total current limit	100mA	

Component

The GENIE E18 microcontroller has 18 legs (known as pins) and these are used as follows (a simplified view is also shown):



Pin	Description
1	Analogue input A2 or digital input D2
2	Status output (ST)
3	Programming input (PR)
4	Reset (when pin goes low)
5	Ground (zero volt) supply voltage
6	Digital output Q0
7	Digital output Q1
8	Digital output Q2
9	Digital output Q3
10	Digital output Q4
11	Digital output Q5
12	Digital output Q6
13	Digital output Q7
14	Power supply voltage (2-5.5V only)
15	Digital input D6
16	Digital input D7
17	Analogue input A0 or digital input D0
18	Analogue input A1 or digital input D1

The required circuit for a GENIE E18 is shown below. It includes a reset switch, download socket and three resistors.

