



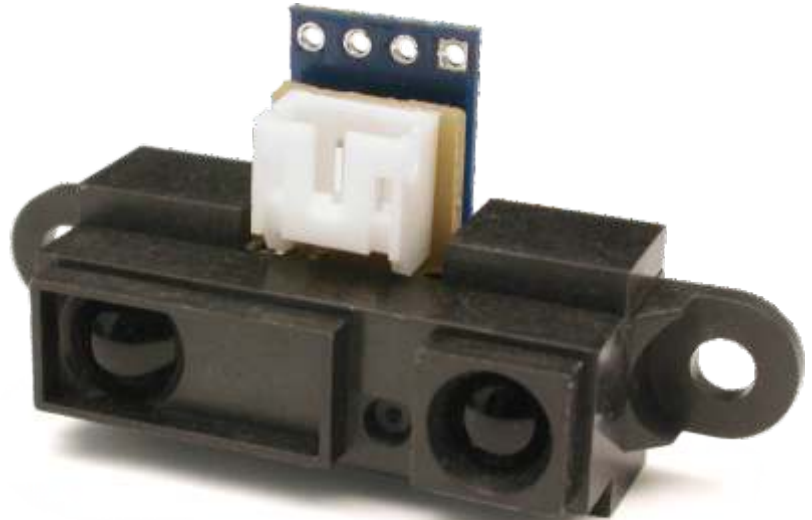
I²C-It

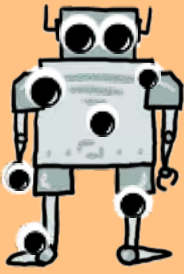
Digital Infrared Ranging System with
I²C Protocol Support

4-Pack Single
SKU: 35080 SKU: 35084

Don't use up valuable I/O on your optical sensors! Many microcontrollers offer the robust I²C network, so use the *I²C-It* for your sensor network!

- GP2D12 Sensor (10-80cm / 4" - 32") range
- Connect up to 8 sensors in a single chain
- Request data in cm, inches, or raw analog (0-255)
- User-selectable device addressing
- Simple 4-wire I²C interface





Excess cable length can adversely affect the I²C bus response. Experiment with lower bus speeds for longer cable lengths.

The default address is 0x20. Add a solder-blob jumper across the labeled pads to set your own address. We can custom-program units with different address locations.

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I²C-It

Technical Data

Recommended Operating Conditions:

Parameter	Symbol	Rating	Unit
Operating Voltage	V _{cc}	4.5 to 5.5	V+
Operating Temperature	T _{opr}	-10 to +40	C
Maximum Cable Length	CL _{max}	35/14	cm/in
I2C Clock Frequency	SCL	100k	Hz
Bus pull-up Resistance	R _{line}	1.2k to 10k	ohms
Required Current	I _{cc}	35 to 55	mA

Jumper Addressing (1=solder jumper):

Device Address	JP1	JP2	JP3
0x20	0	0	0
0x22	0	0	1
0x24	0	1	0
0x26	0	1	1
0x28	1	0	0
0x2A	1	0	1
0x2C	1	1	0
0x2E	1	1	1

Device Pin-Out:

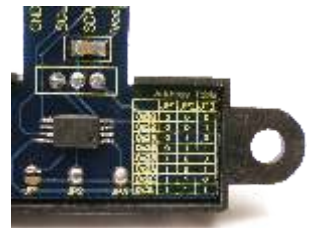
The square pad denotes "Pin 1"

Pin1 - Ground (signal ground)

Pin2 - SCL (I²C clock line)

Pin3 - SDA (I²C data line)

Pin 4 - V_{cc} (+4.5 to +5.5V)



We've put together some sample snippets of code showing how to interface the I²C-It to Atmel, PIC, and PICAXe micros. Download them from our website!

www.HVWTech.com

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