

MDP Linesensor Board

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1 Features

1. Uses the MDP stackable I2C-based expansion system
2. Contains circuitry for 4 IR reflectivity sensors.
3. Additonal prototyping area
4. 4 spare IO bits
5. Selectable I²C address
6. Prototyping connections for power rails and I²C
7. Uses robust DB9 plugs
8. Double-sided PCB designed for easy assembly.
9. Clearly marked vias that can be hand soldered.

2 Description

This board features the necessary layout for four IR reflectivity detectorss as used in the CUED 2nd year Integrated Design Project for detecting white lines on a surface. I2C interface is provided by a PCF8574. The four remaining bits of the interface are available for use, and a small prototyping area features at one end of the board: this is capable of holding several ICs simultaneously. Address selection is by means of three jumpers.

3 Attachments

The following pages are attached:

1. Circuit schematic
2. Assembly drawing
3. Mirrored component side artwork
4. Non-mirrored solder side artwork







