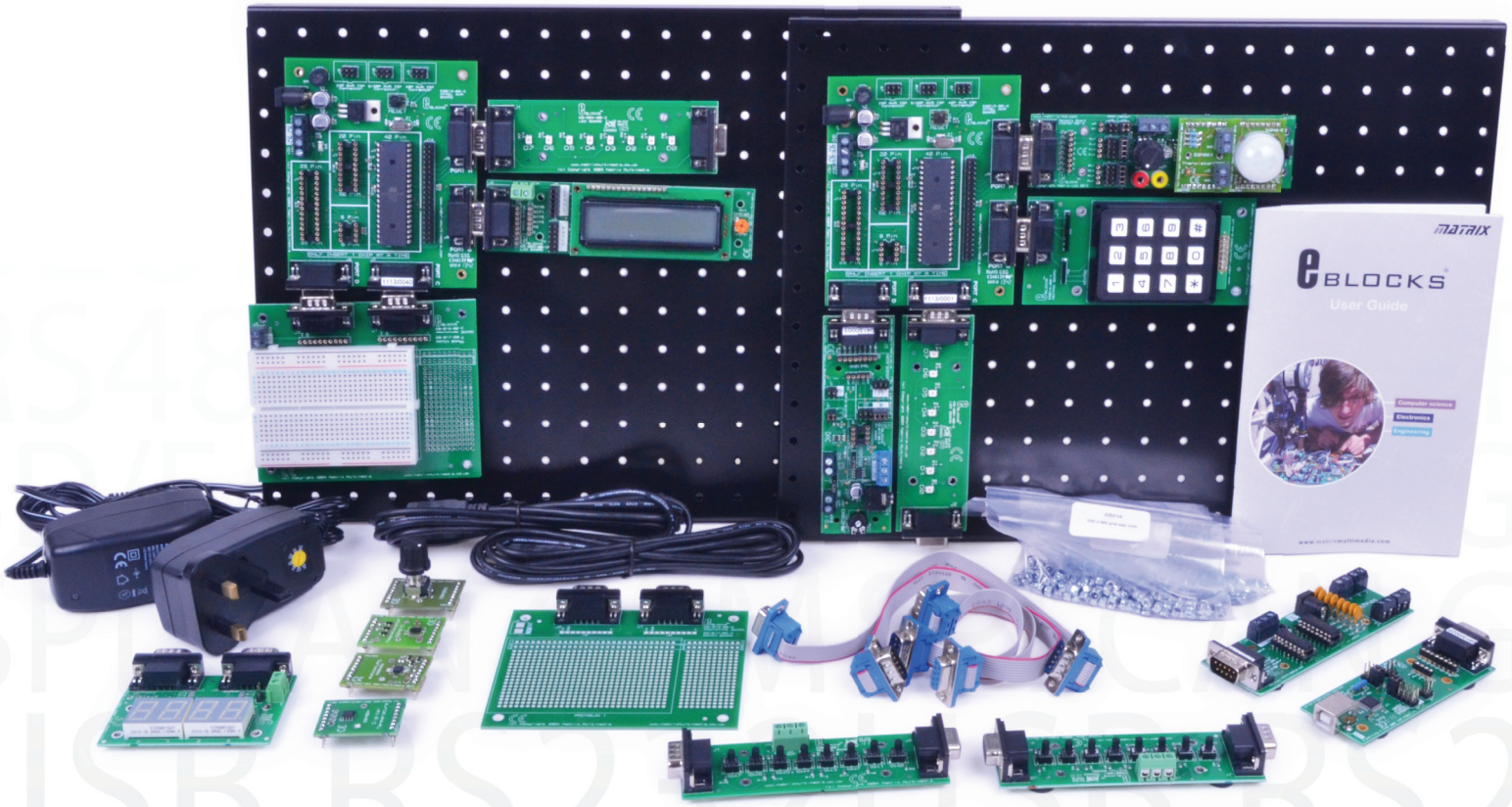
MATRIX

eBLOCKS®

Deluxe AVR starter pack



General information

This board provides a selection of E-blocks™ that can be used for a wide range of applications in microcontroller programming: both for learning and for projects.

1. Features
- Includes two AVR programming boards
- A comprehensive course with compilers and IDEs is available
- Supplied in rugged storage trays with cables, backplanes and accessories.
- Downloadable resources from the Matrix TSL website
- Utility software for downloading compiled code
- Free online course in microcontroller programming

2. Benefits
- Can be used with a wide range of students - from technician to postgraduate
- Can be used across many subjects in Engineering and Computer Science
- Saves a great deal of time in project construction
- Can be combined with our courseware to provide a complete solution to learning AVR programming

Pack description

These deluxe packs are ideal for the more sophisticated learner who needs to learn more than just the basics of microcontroller programming- particularly where communications between one microcontroller and another are an important issue and for this reason they include two device programmer boards.
This E-blocks pack is based on the popular Atmel AVR series of microcontrollers and is sufficient for a range of projects based on Atmel AVR technology. The pack contains metal backplanes for mounting E-blocks, a power supply, a collection of individual E-blocks together with accessories such nuts and bolts, mounting pillars, cables and IDC connectors etc. The E-blocks boards and accessories can be used to form a wide number of electronic systems, for learning or for project work, and additional E-blocks boards and sensors can be added to these systems as you need them.

Plastic covers for all E-blocks are available which can extend E-block board life and prevent chips and links from being removed.
The product is shipped in rugged plastic trays for storage and transport.

At the heart of this collection of E-blocks is the AVR Multiprogrammer which, together with the supplied in-system programmer simplifies the development of AVR projects. The AVR in-system programmer gives the designer a compact and reliable programming tool to program all in-system programmable devices using the 6 pin IDC connector. This connects to the serial port on your PC and to the E-blocks AVR board. The E-blocks AVR board is compatible with a range of 20 pin and 40 pin flash Atmel AVR devices which sit in the appropriate DIL sockets on the board. The I/O lines from these chips are fed to 4 E-blocks ports each of which contain 8 I/O lines. The AVR device is clocked by a crystal - which can be easily removed to insert a crystal of your pre-ferred frequency – or by an RC oscillator inside the AVR device.
Courseware and software for programming in C or assembly are available separately, as is a full version of our graphical programming software - Flowcode.

Further information

1. Learning time

Not applicable: learning time is dictated by the course used with E-blocks. Flowcode , Assembly or C

2. Prerequisites

Windows skills
Digital Electronics

3. Manual

An E-blocks user's guide is available electronically.

4. System requirements

PC with CD ROM drive and Windows XP or later.

5. Futher information

A separate datasheet is available for each of the E-blocks boards included in the pack. Please see our web site for details.

6. Order code

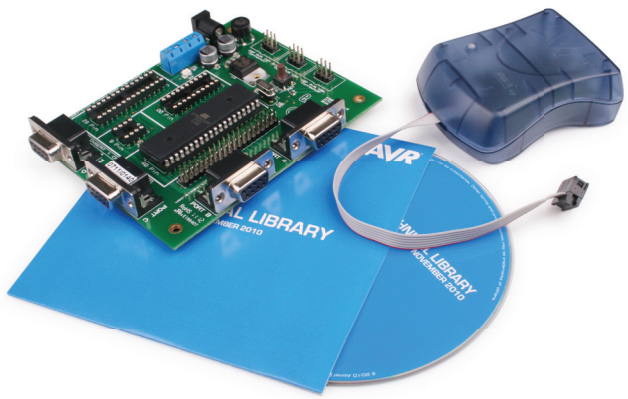
The order code for this product is EB9532.

7. Also consider

Courses in Flowcode, C and Assembly code programming.
Deluxe starter packs
Solutions and trainer packs
Flowcode and Chip pack

Pack Contents

The table gives a list of the major items of the pack contents.
Datasheets on any individual item are available from the resource section of the Matrix TSL website www.matrixtsl.com



Qty	Description
2	Metal backplane and accessories
1	E-blocks terminal board
2	E-blocks LED board
1	E-blocks LCD board
2	E-blocks push-to-make switch board
1	E-blocks Dual 7-segment display
1	E-blocks power board
1	E-blocks SPI bus D/A and memory board
1	E-blocks Keypad board
1	E-blocks Prototype board
1	E-blocks patch board kit
2	E-blocks ATMEL AVR board
1	E-blocks USB 232 board
1	E-blocks sensors mother board
2	AVR In-System Programmer
1	Thermistor sensor module
1	Digital temperature sensor module
1	Gyroscope sensor module
1	Passive infrared (PIR) sensor module
1	Magnetometer sensor module
2	Power supply
2	USB lead

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