

Deluxe AVR starter pack

What does it do?

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.

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



Features

- Includes an AVR programming board
- Include utility software for downloading code
- A comprehensive course with compilers and IDEs is available
- Supplied in rugged storage trays with cables, backplane and accessories.

Description

This E-blocks pack is based on the popular Atmel AVR series of microcontrollers. It provides you with a set of hardware resources that allow you to develop projects in both C and assembly with a minimum of fuss. This pack includes the following hardware: an AVR in-system programmer, 2 AVR Multiprogrammer boards, 2 Switch boards, 2 LED boards, an LCD board, a 7-segment display board, an RS232 board, a prototype board, a patch board, an IR/IrDa board, a keypad, a D/A and memory board, an A3 mounting system with nuts and bolts, a power supply (please specify country) and a rugged case. Clear acrylic covers for these E-blocks can be ordered separately.

This suite of E-blocks is sufficient for a range of projects based on Atmel AVR technology. Further E-blocks and sensors can be added as required. At the heart of this collection of E-blocks is the AVR Multiprogrammer which includes everything you need to both program an AVR microcontroller as well as to develop AVR projects. The AVR in-system programmer (USB) gives the designer a compact and reliable programming tool to program a range of in-system programmable devices. 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 preferred frequency - or by an RC oscillator inside the AVR device. The CD ROM includes a range of development tools including an Integrated Development Environment for code writing in assembly and debugging, a professional C compiler, and the ISP programming software. An additional CD ROM containing a complete course in programming the AVR microcontroller in C is available.

Learning time

Not applicable: learning time is dictated by the CD ROM based course 'C for AVR microcontrollers' which will give around 40 hours of learning time.

Prerequisites

Windows skills
Digital Electronics

Manual

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

System requirements

PC with CD ROM drive and Windows 98 or greater.

Further information

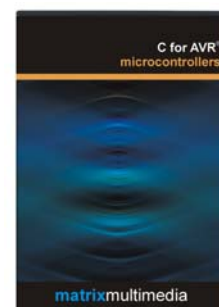
A separate datasheet is available for each of the E-blocks boards included in the pack. Please see our web site for details.

Order code

The order code for this product is EB343.

Also consider

Our complete course in programming the AVR ATmega in C. This includes a full IDE and compiler.

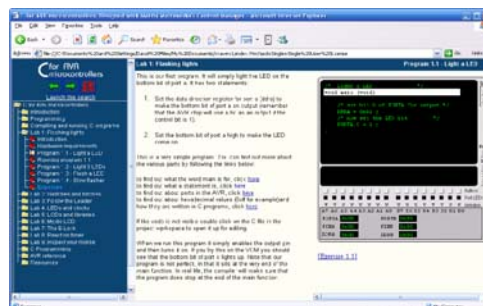


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Pack contents

The table below gives a list of the pack contents. Datasheets on any individual item are available on request.

Tray	Qty	Code	Description
1	1	BP232	E-blocks backplane - tray compatible
1	1	EB216	Pack of 100 M3 anti-slip nuts
1	1	EB217	Pack of 100 M3 12mm pozi head screws
1	1	EB251	Male to Male IDC connector AVR in-system serial programmer
1	1	EB283	
1	1	EB355	E Blocks User Guide
1	2	EB634	E-blocks IDC cable
1	1	ELSAM	ELSAM mini CD ROM
1	1	HP2045	Shallow plastic tray
1	1	HP4039	Lid for plastic trays
1	1	HP5328	International power supply with adaptors
1	2	HP6219	E-blocks plastic mounting pillar
1	1	HP9734	Cardboard box for trays
2	1	EB00300	E-blocks sensor interface
2	2	EB00400	E-Blocks LED board
2	1	EB00500	E-Blocks LCD board
2	2	EB00700	E-Blocks Switch board
2	1	EB00800	E-Blocks Quad 7-segment display
2	1	EB01100	E-blocks power board
2	1	EB01300	E-blocks D/A and memory board
2	1	EB01400	E-blocks Keypad
2	1	EB01600	E-Blocks Prototype board
2	1	EB01700	E-blocks patch board
2	2	EB01900	E-blocks ATMEL AVR board
2	1	EB03900	E-blocks USB232 - board only
2	1	EBPUB	E-blocks publicity sheet
2	1	HP2045	Shallow plastic tray
2	2	HP2642	Holed foam for E-blocks trays
2	1	HP4039	Lid for plastic trays
2	1	HP9734	Cardboard box for trays



A screen image from the AVR course showing the microcontroller simulator