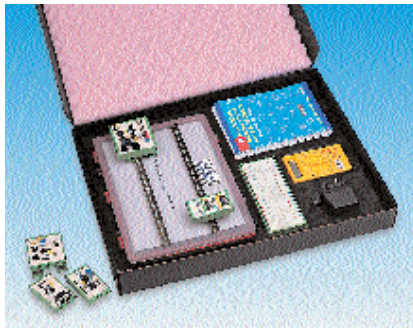


Electronics Training

FARNELL Electronic Lab - Starter Kit

Bluebird Electronics



Developed exclusively for Farnell by Bluebird Electronics, the Electronic Lab forms a basis of a learning aid for students and engineers alike. The basic kit consists of a base unit with DIN rails and component storage compartment, a power supply module, a prototype board and a digital multimeter. Included in the pack is an educational book, "A Practical Introduction to Electronics (from bits to chips)" - by Nigel Gardner and Max Horsey, and components for start up. Supporting modules, readily connectable and interchangeable on the DIN rails are available separately, each with their application and circuit operations outlined in the book.

SEM357

	Order Code	Price Each
Farnell Electronic Starter Kit	704-325.†	
Power Module - mains power supply and regulators	704-430.†	
Oscillator Module - signal generator, amplitude/frequency adjustable	704-386.†	
Audio Amplifier Module - 250mW amplifier and speaker	704-374.†	
Relay/Opto Module - relays and opto-isolators	704-349.†	
RS232 Module - 9 pin 'D' interface	704-350.†	
Switches, Pots and Push-button Module	704-362.†	
Logic Probe Module - 5 or 12V operation	704-398.†	
Dual 8 LED Module - with logic inputs and buffered drive	704-404.†	
Square Wave Generator Module - source with fixed output frequencies	704-416.†	
Microcontroller Module - PIC programmed	704-428.†	
Prototype Module - matrix of 640 user and 200 power points	704-337.†	

† Available until stocks are exhausted

A Practical Introduction to Electronics (from bits to chips)

Bluebird Electronics



Written by Nigel Gardner and Max Horsey, the book is a guide towards understanding general principles of electronics for those interested or studying electronics, physics, science and technology courses at GCSE and 'A' levels. The reader is introduced to the basic principles and guided through subject areas covering semiconductor devices, operational amplifiers, digital electronics, control loop principles, timing circuits, microcontrollers, safety and circuit construction techniques. The text includes worked examples and questions for self assessment.

The book supports the Farnell Electronic Lab (Order Code 704-325) covering theory, construction and use of the various modules to aid understanding practically.

SEM391

Order Code	Price Each
703-758.	1+ 5+

SMD in a Box

Bluebird Electronics



SMD in a Box has been designed to provide the basic information and tools to enable an engineer to evaluate the use of surface mount technology in addition to constructing some simple circuits.

SMD in a Box contains:-

- Two project PCBs - Logic Probe and Mains Cable Detector
- Tube of solder paste + application needle
- A selection of components to build the projects
- Pair of tweezers
- Magnifying glass

- Booklet on SMD technology and PCB design recommendations
- Cleaning wipes
- Weller soldering tip for fine SMD work - 0.4mm tip

Additional requirements:-

Heat source - heat gun, Weller TCP soldering iron or other reflow system.

SEM696

SMD in a Box	Order Code 119-994	each
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A/D and D/A Converters

SEM79 SEM79A

6-bit A/D		Linearity Error ±	Conversion Time ± ½	Power Dissipation	Features	Mftrs. List No.	Order Code	Price Each					
Mftr.	Pins	LSB	LSB, µs	mW (max.)				1+	10+	100+	250+	500+	
1002	MAX	36	¼	0.016	380	Dual Channel, Flash C, D/B, P, R.....	MAX1002CAX	SMD 474-071					
3306	HAR	18	½	0.1	100	(Flash) C, P.....	CA3306CE	.396-140					
8-bit A/D													
0803	NSC	20♦	½	100*	12.5	C, P, S/A	ADC0803LCN	.396-163					
0804	NSC	20♦	1	100*	12.5	C, P, S/A	ADC0804LCM	SMD .396-175					
0804	NSC	20♦	1	100*	12.5	C, P, S/A	ADC0804LCN	.396-187					
0804	INTS	20	1	100*	12.5	C, P, S/A	ADC0804LCN	NEW 353-9090					
0808	NSC	28♦	½	100	15	(8 CHANNEL) C, P, S/A.....	ADC0808CCN	.397-787					
0809	NSC	28♦	1	100	15	(8 CHANNEL) C, P, S/A.....	ADC0809CCN	.397-799					
0817	NSC	40♦	1	100	15	(16 CHANNEL) C, P, S/A.....	ADC0817CCN	.397-805					
0831	NSC	8♦	1	32	12.5	C, S, S/A.....	ADC0831CCN	.396-205					
0838	NSC	20♦	1	32	12.5	(8 CHANNEL) C, S, S/A	ADC0838CCN	.396-217					
0844	NSC	20♦	1	40	15	(4 CH MUX) C, P, S/A (IND TEMP)	ADC0844CCJ	.949-814					
0844	NSC	20♦	1	40	15	(4 CHANNEL) C, P, S/A.....	ADC0844CCN	.396-229					
0848	NSC	24♦	½	40	15	(8 CH MUX) C, P, S/A	ADC0848BCN	.949-838					
0848	NSC	24♦	1	40	15	(8 CHANNEL) C, P, S/A.....	ADC0848CCN	.396-230					
0848	NSC	28♦	1	40	15	(8 CH MUX) C, P, S/A (PLCC)	ADC0848CCV	SMD 949-863					
549	TI	8	½	17	6*	C, S, S/A.....	TLC549IP	.396-321					
830	BB	20	±1.5	60MHz	170	C, T/H, R, P, (IND TEMP)	ADS830E	SMD 332-3614					
831	BB	20	±2	80MHz	275	C, T/H, R, P, (IND TEMP)	ADS831E	SMD 332-3626					
1111	MAX	16	1	55	667	(4 channel), C, R, S/A, T/H	MAX1111CEE	SMD 474-095					
1112	MAX	20	1	55	640	(8 channel), C, R, S/A, T/H	MAX1112CAP	SMD 493-843					
1173	NSC	24	0.8	0.018	33	C, S/H, R (IND TEMP)	ADC1173CIJM	SMD 116-993					
1173	NSC	24	0.8	0.018	33	C, S/H, R (IND TEMP, TSSOP).....	ADC1173CIMTC	SMD 117-006					
5094	AD					Test board for the AD5094 with dc biasing. The board has several modes of operation - DC - coupled analogue inputs, demuxed outputs, differential clocks and internal voltage reference.							
5510	TI					Evaluation board for the TLC5510INS A/D Converter. This kit allows quick and accurate evaluation of the device, the board includes buffer amplifier, control logic and flexible interface with connectors. Full schematic and manual supplied.	AD9054PCB	.314-5992					
5510	TI	24	0.75	20MSPS	130	C, L, P, R, S/H.....	TLC5510EVM	.334-9743					
							TLC5510INS	.334-9755					