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Volume III



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### Introduction

### Welcome to The Sourcing Guide

Electronics Sourcing's handy A5-size Sourcing Guide has been updated and reprinted for 2018. Designed to help purchasing professionals find new and alternative suppliers, the free Guide is divided into two distinct sections.

From the front cover to page 64, buyers are introduced to a plethora of electronics products and services. Categories include: Broadline Distribution, Connectors and Cabling, Contract Manufacturing, EMC, Enclosures, Excess Inventory Management, Frequency, ICs and Semiconductors, Obsolescence, Passives, PCB, Power and Batteries, RF Connectors, Training and Thermal Management.

From page 65 onwards, we dig deeper, offering selection charts which breakdown components and services into greater detail. For example, Frequency Management is broken down by crystals, oscillators, programmable oscillators, resonators, VCOs and VCXOs.

Our goal is to help purchasing professionals make informed buying decisions and we are confident *The Sourcing Guide* will play its part.



### Contact

### Sourcing



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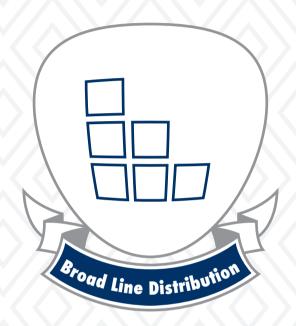
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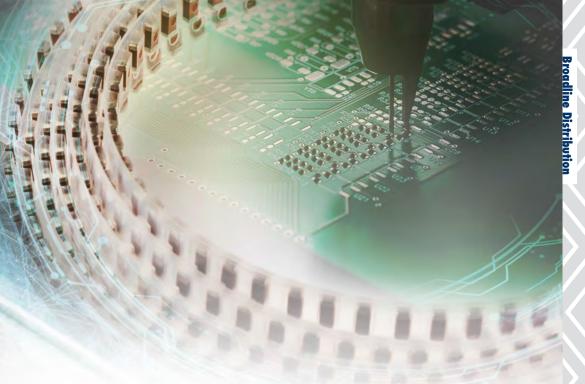


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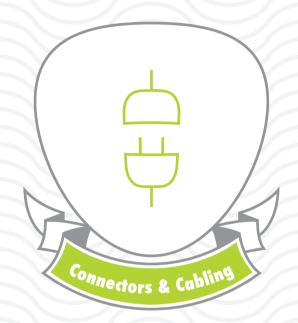






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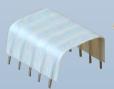




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### Design



Electronic Design Product Design Rapid Prototyping Wireless Integration

### Manufacture



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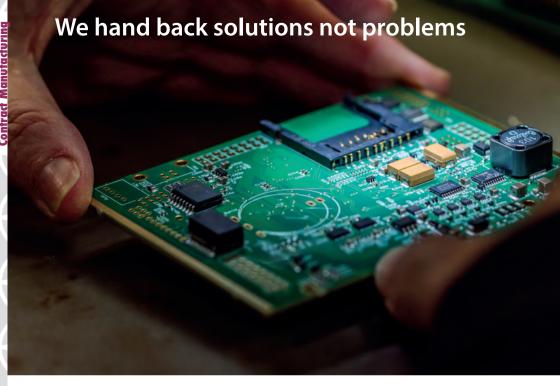


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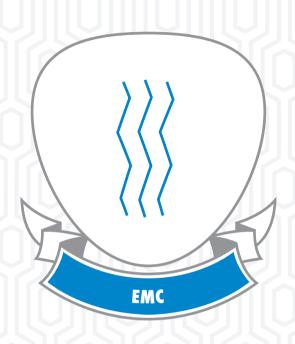
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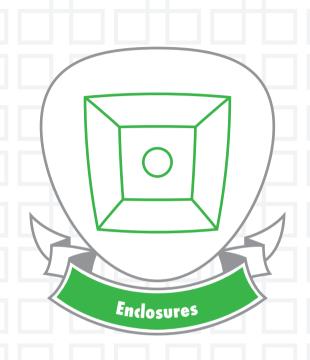






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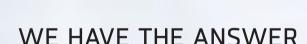
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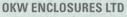




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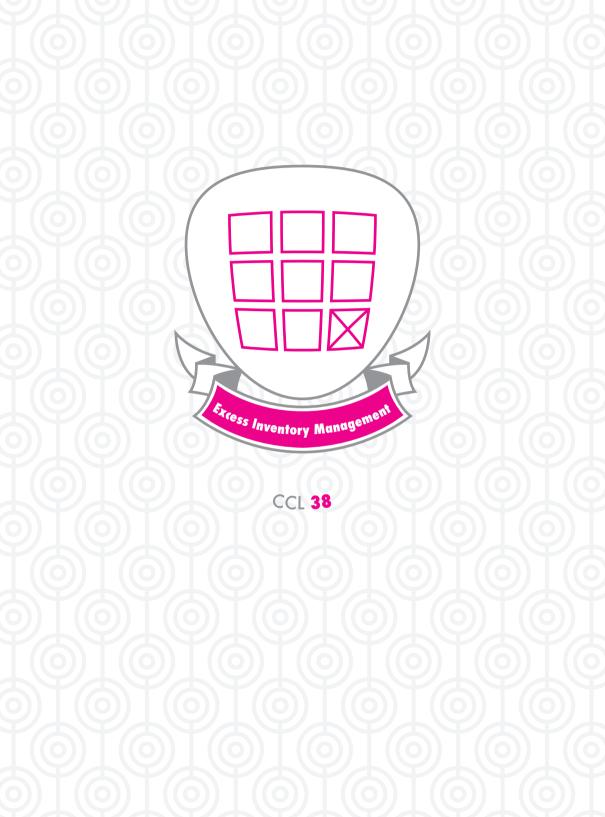
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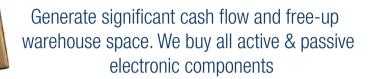
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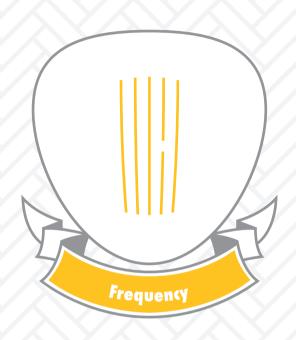
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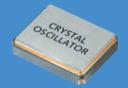


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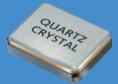


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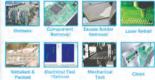


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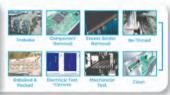


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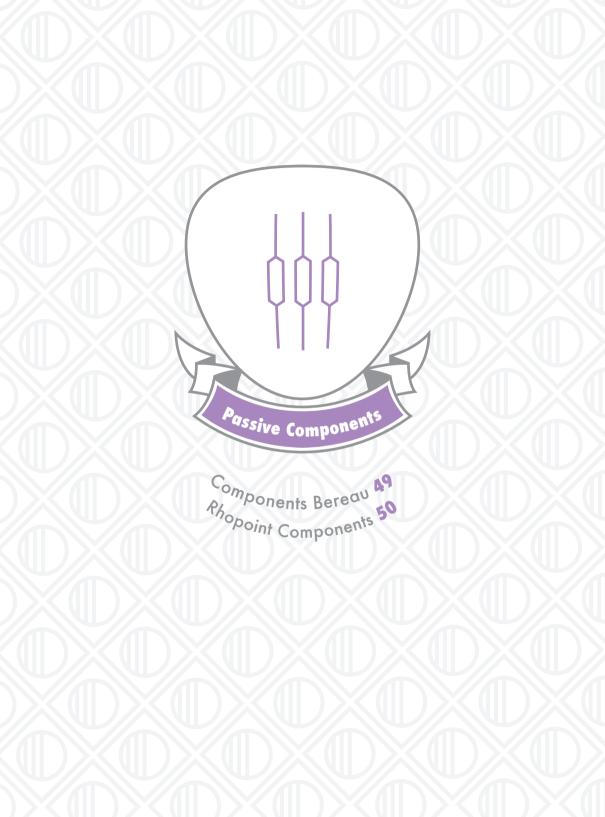
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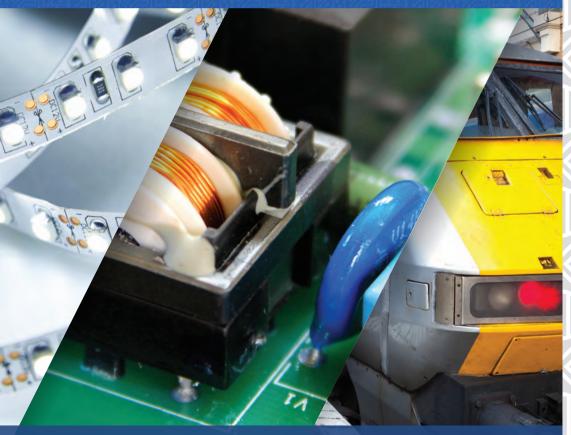
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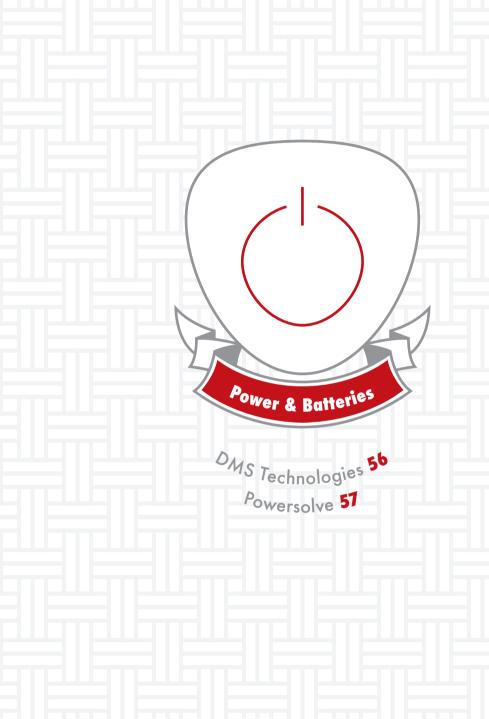
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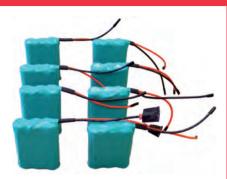
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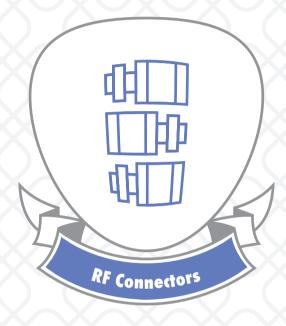


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COAX Connectors 59

## CONNECTORS LTD



RF Connector:



Advanced Rework
Technology 61













As an Authorized Training Center. A.R.T Ltd can offer Certified Training to the IPC Standards listed below. A.R.T Ltd are the only training center in the UK able to offer CID PCB Design and IPC-6012 training and Space Addendum training for J-STD-001 and IPC-A-620.



Acceptability of Electronic Assemblies



Requirements for Soldering Electrical and Electronic Assemblies



Repair Rework and Modification of Electronic Assemblies



Requirements and Acceptance for Cable and Wire Harnesses



Qualification and Performance Specification for Rigid PCB's

**Acceptability of Printed Boards** 



G. English Electronics

### UNIQUE FANS AND BLOWERS FOR INDUSTRIAL APPLICATIONS

FROM COOLING TO AIR MOVING

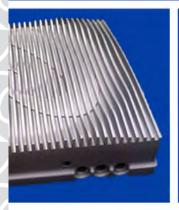








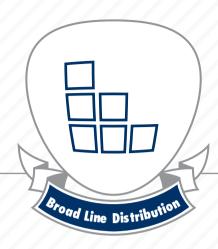




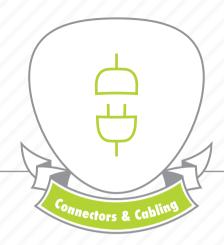




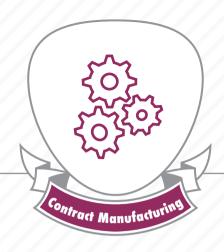
www.gelec.co.uk



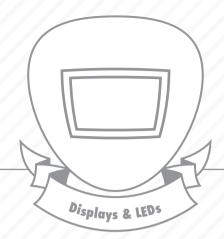
| Company                 | Page  | Total number of lines<br>for principal | Minimum order value | Connectors and Cabling | Contract Manufacturing | Displays and LEDs | EMC | Electromechanical | Enclosures | Frequency Management | ICs and Semiconductors | Obsolescence Managem | Passive Components | PCBs | Power and Batteries | Programming Services | Sensors | Switches and Keyboards | Thermal Management | Wireless Solutions |
|-------------------------|-------|--|---------------------|------------------------|------------------------|-------------------|-----|-------------------|------------|----------------------|------------------------|----------------------|--------------------|------|---------------------|----------------------|---------|------------------------|--------------------|--------------------|
| America II Electronics  | 09,43 | 350                                    | 0                   | •                      |                        | •                 | •   |                   | •          | •                    | •                      | •                    | •                  | •    | •                   | •                    | •       | •                      | •                  | •                  |
| Anglia Components Ltd   | 07,BC | 1,000,000                              | 0                   | •                      |                        | •                 | •   | •                 | •          | •                    | •                      |                      | •                  | •    | •                   | •                    | •       | •                      | •                  | •                  |
| Avant Electronics Ltd   | 44    | 25,000                                 | £50                 |                        |                        |                   |     |                   |            |                      | •                      | •                    | •                  |      |                     |                      | •       |                        | •                  | •                  |
| Digi-Key Electronics    | 02,06 | 6.8m                                   | 0                   |                        |                        | •                 | •   | •                 | •          | •                    | •                      |                      | •                  | •    | •                   | •                    | •       | •                      | •                  | •                  |
| Electro Enterprises Ltd | 15    | 1,000,000                              | £25                 | •                      | •                      |                   | •   |                   |            |                      |                        | •                    |                    |      |                     |                      |         | •                      |                    |                    |
| Mouser Electronics      | 10,42 | 1,000,000                              | 0                   | •                      |                        | •                 | •   | •                 | •          | •                    | •                      | •                    | •                  |      | •                   | •                    | •       | •                      | •                  | •                  |
| Rapid Electronics       | 12    | 100,000                                | 0                   | •                      |                        | •                 |     | •                 | •          | •                    | •                      |                      | •                  | •    | •                   | •                    | •       | •                      | •                  | •                  |
| RS                      | 11    | 550,000                                | 0                   | •                      |                        | •                 | •   | •                 | •          | •                    | •                      | •                    | •                  | •    | •                   | •                    | •       | •                      | •                  | •                  |



| Company                      | Page  | Backplane Connectors | Barrel Connectors | Board-to-board Connect | Card Edge Connectors | D-Sub Connectors | Fibre Optic Cables | Modular Cables | Modular Connectors | Multiple Conductor Cab | Rectangular Connectors | RF Connectors | Terminal Blocks | Other |
|------------------------------|-------|----------------------|-------------------|------------------------|----------------------|------------------|--------------------|----------------|--------------------|------------------------|------------------------|---------------|-----------------|-------|
| America II Electronics       | 09,43 | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| Anglia Components Ltd        | 07,BC | •                    | •                 | •                      |                      | •                |                    |                | •                  |                        | •                      | •             | •               |       |
| Binder Uk Ltd                | 14    |                      |                   |                        |                      |                  |                    |                |                    |                        |                        |               |                 | •     |
| CamdenBoss Ltd               | 34    |                      |                   | •                      | •                    |                  | •                  |                | •                  |                        |                        |               | •               |       |
| COAX Connectors Ltd          | 59    |                      | •                 | •                      |                      |                  |                    |                |                    | •                      |                        | •             |                 |       |
| Components Bureau            | 49    |                      |                   | •                      |                      | •                |                    | •              | •                  |                        |                        | •             | •               |       |
| Electro Enterprises Ltd      | 15    | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| G English Electronics Ltd    | 64    |                      | •                 |                        |                      |                  |                    |                |                    | •                      |                        |               |                 |       |
| Hirose Electric Europe B.V   | 16    |                      | •                 | •                      | •                    | •                |                    |                | •                  |                        | •                      | •             |                 |       |
| Hitaltech UK Ltd             | 17    |                      |                   | •                      |                      | •                |                    |                | •                  |                        |                        |               | •               |       |
| Mouser Electronics           | 10,42 | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| ODU UK Ltd                   | 18    |                      |                   | •                      |                      |                  |                    |                | •                  |                        | •                      |               |                 |       |
| Rapid Electronics            | 12    | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| Rhopoint Components Limited  | 50    |                      |                   | •                      |                      |                  |                    |                | •                  |                        | •                      |               | •               |       |
| Rhopoint Sourcing Limited    | 47    | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| RS                           | 11    | •                    | •                 | •                      | •                    | •                | •                  | •              | •                  | •                      | •                      | •             | •               |       |
| Speedboard Assembly Services | 21    |                      |                   |                        |                      |                  |                    |                |                    |                        |                        |               |                 | •     |
| TTI, Inc., Europe            | 08    | •                    |                   |                        |                      |                  |                    |                |                    | •                      |                        |               |                 | •     |



| Company                      | Page | BGA Capacity | Box Build | Cable and Harnessing | Design Capability | Prototyping | Surface Mount Lines | Through Life Repair and<br>Maintenance |
|------------------------------|------|--------------|-----------|----------------------|-------------------|-------------|---------------------|--|
| CamdenBoss Ltd               | 34   |              |           |                      | •                 | •           |                     |  |
| COAX Connectors Ltd          | 59   |              |           | •                    | •                 | •           |                     |  |
| Corintech Ltd                | 20   | •            | •         |                      | •                 | •           | •                   |  |
| Electrica Limited            | 22   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Electro Enterprises Ltd      | 15   |              | •         | •                    |                   |             |                     |  |
| FermionX Ltd                 | 24   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Garner Osborne Circuits Ltd  | 53   | •            | •         |                      | •                 | •           | •                   |  |
| Jaltek Systems Ltd           | 23   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| M-TEK (Assembly) Itd         | 29   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Nemco Limited                | 27   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| ODU UK Ltd                   | 18   |              |           | •                    |                   |             |                     |  |
| Protronix EMS Ltd            | 30   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Speedboard Assembly Services | 21   | •            | •         | •                    |                   | •           | •                   | •                                      |
| Tioga Limited                | 26   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Trizo Ltd                    | 28   | •            | •         | •                    | •                 | •           | •                   | •                                      |
| Trojan Electronics Ltd       | 25   | •            | •         | •                    | •                 | •           | •                   | •                                      |



| Company                   | Page  | Display Modules | LED Lighting | LED - Spacers, Standoffs | ОГЕР | Other |
|---------------------------|-------|-----------------|--------------|--------------------------|------|-------|
| America II Electronics    | 09,43 | •               | •            | •                        | •    |       |
| Anglia Components Ltd     | 07,BC | •               | •            | •                        | •    |       |
| CamdenBoss Ltd            | 34    |                 | •            | •                        |      |       |
| Digi-Key Electronics      | 02,06 | •               | •            | •                        | •    |       |
| Mouser Electronics        | 10,42 | •               | •            | •                        | •    |       |
| Protronix EMS Ltd         | 30    |                 |              |                          |      | •     |
| Rapid Electronics         | 12    | •               | •            | •                        | •    |       |
| Rhopoint Sourcing Limited | 47    | •               | •            | •                        | •    |       |
| RS                        | 11    | •               | •            | •                        | •    |       |



| Company                        | Page  | E-mech Connectors | E-mech Switches | PDUs | Terminals | Touch Panels |
|--------------------------------|-------|-------------------|-----------------|------|-----------|--------------|
| America II Electronics         | 09,43 | •                 | •               | •    | •         | •            |
| Anglia Components Ltd          | 07,BC | •                 | •               |      | •         | •            |
| Binder Uk Ltd                  | 14    | •                 |                 |      |           |              |
| CamdenBoss Ltd                 | 34    | •                 | •               |      | •         |              |
| COAX Connectors Ltd            | 59    | •                 |                 |      |           |              |
| Components Bureau              | 49    | •                 | •               |      |           |              |
| Computer Components Ltd. (CCL) | 38    | •                 | •               |      | •         | •            |
| Digi-Key Electronics           | 02,06 | •                 | •               | •    | •         | •            |
| G English Electronics Ltd      | 64    |                   | •               |      |           | •            |
| Hirose Electric Europe B.V     | 16    | •                 |                 |      |           |              |
| Mouser Electronics             | 10,42 | •                 | •               | •    | •         | •            |
| ODU UK Ltd                     | 18    | •                 |                 |      |           |              |
| Rapid Electronics              | 12    | •                 | •               | •    | •         | •            |
| Rhopoint Sourcing Limited      | 47    | •                 | •               | •    | •         |              |
| TTI, Inc., Europe              | 08    | •                 | •               | •    | •         | •            |



| Company                   | Page  | Beryllium Copper Fing<br>Strips | Cable Shielding Jacket | Conductive Adhesive T | Conductive Adhesives | Conductive Silicones | Conductive Fabric over<br>Gaskets | Conductive Foam | Shielded Cable Glands | Shielded Windows | Ferrites and Cores | Ventilation Panels |
|---------------------------|-------|---------------------------------|------------------------|-----------------------|----------------------|----------------------|-----------------------------------|-----------------|-----------------------|------------------|--------------------|--------------------|
| America II Electronics    | 09,43 | •                               | •                      | •                     | •                    | •                    | •                                 | •               | •                     | •                | •                  | •                  |
| Anglia Components Ltd     | 07,BC |                                 |                        |                       |                      |                      |                                   |                 |                       |                  | •                  |                    |
| CamdenBoss Ltd            | 34    |                                 |                        |                       | •                    |                      |                                   |                 |                       |                  |                    |                    |
| Components Bureau         | 49    |                                 |                        |                       |                      |                      |                                   |                 |                       |                  | •                  |                    |
| Digi-Key Electronics      | 02,06 | •                               | •                      | •                     | •                    | •                    | •                                 | •               | •                     |                  | •                  | •                  |
| Electro Enterprises Ltd   | 15    |                                 | •                      | •                     | •                    | •                    |                                   |                 | •                     |                  |                    |                    |
| G English Electronics Ltd | 64    |                                 |                        |                       |                      | •                    |                                   |                 |                       | •                | •                  |                    |
| Kemtron Ltd               | 32    | •                               | •                      | •                     | •                    | •                    | •                                 | •               | •                     | •                | •                  | •                  |
| Mouser Electronics        | 10,42 | •                               | •                      | •                     | •                    | •                    |                                   |                 | •                     |                  |                    |                    |
| Rhopoint Sourcing Limited | 47    | •                               | •                      | •                     | •                    | •                    | •                                 | •               | •                     | •                | •                  | •                  |
| RS                        | 11    | •                               | •                      | •                     | •                    | •                    | •                                 | •               | •                     | •                | •                  | •                  |
| TTI, Inc., Europe         | 08    | •                               | •                      | •                     | •                    |                      |                                   |                 | •                     |                  | •                  |                    |



| Company                     | Page  | 19inch Rack Mount<br>Enclosures | Custom Enclosures | Desktop Enclosures | Development Board<br>Enclosures | DIN Rail Enclosures | Floor Standing Enclosure | Hand Held Enclosures | Instrument Cases | IP Rated/Sealed Enclosur | Wall Mount Enclosures | Wearable Enclosures |
|-----------------------------|-------|---------------------------------|-------------------|--------------------|---------------------------------|---------------------|--------------------------|----------------------|------------------|--------------------------|-----------------------|---------------------|
| America II Electronics      | 09,43 | •                               | •                 | •                  | •                               | •                   | •                        | •                    | •                | •                        | •                     | •                   |
| Anglia Components Ltd       | 07,BC | •                               |                   | •                  | •                               | •                   |                          | •                    | •                | •                        | •                     | •                   |
| CamdenBoss Ltd              | 34    | •                               | •                 | •                  | •                               | •                   | •                        | •                    | •                | •                        | •                     | •                   |
| Digi-Key Electronics        | 02,06 | •                               | •                 | •                  | •                               | •                   | •                        | •                    | •                | •                        | •                     |                     |
| G English Electronics Ltd   | 64    |                                 | •                 |                    |                                 |                     | •                        | •                    | •                |                          | •                     |                     |
| Hitaltech UK Ltd            | 17    |                                 |                   |                    |                                 | •                   |                          | •                    |                  | •                        | •                     |                     |
| METCASE Enclosures          | 36    | •                               | •                 |                    | •                               |                     |                          |                      | •                | •                        | •                     |                     |
| Mouser Electronics          | 10,42 | •                               |                   | •                  | •                               | •                   |                          | •                    | •                | •                        | •                     |                     |
| OKW Enclosures Ltd          | 35    |                                 |                   | •                  | •                               | •                   |                          | •                    | •                | •                        | •                     | •                   |
| Rapid Electronics           | 12    | •                               | •                 | •                  | •                               | •                   | •                        | •                    | •                | •                        | •                     |                     |
| Rhopoint Components Limited | 50    |                                 |                   |                    |                                 | •                   |                          |                      |                  |                          |                       |                     |
| RS                          | 11    | •                               | •                 |                    | •                               | •                   |                          | •                    | •                | •                        | •                     |                     |



| Company                        | Page  | Lot Volume Buys | Excess Inventory<br>Appraisal at facility | Other |
|--------------------------------|-------|-----------------|---|-------|
| America II Electronics         | 09,43 | •               | •   |       |
| Avant Electronics Ltd          | 44    | •               | •   |       |
| Computer Components Ltd. (CCL) | 38    | •               | •   |       |
| Digi-Key Electronics           | 02,06 | •               | •   |       |
| Electro Enterprises Ltd        | 15    | •               | •   |       |
| Rhopoint Sourcing Limited      | 47    |                 |   | •     |



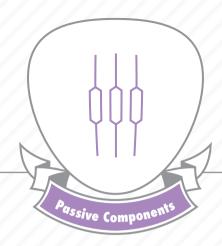
| Company                   | Page  | Crystals | Oscillators | Programmable Oscillators | Resonators | VCOs (Voltage Controlled<br>Oscillators) | АСХО |
|---------------------------|-------|----------|-------------|--------------------------|------------|--|------|
| America II Electronics    | 09,43 | •        | •           | •                        | •          | •  | •    |
| Anglia Components Ltd     | 07,BC | •        | •           | •                        | •          | •  | •    |
| Digi-Key Electronics      | 02,06 | •        | •           | •                        | •          | •  | •    |
| Jauch Quartz UK Ltd.      | 40    | •        | •           |                          |            |  |      |
| Mouser Electronics        | 10,42 | •        | •           | •                        | •          | •  | •    |
| Rapid Electronics         | 12    | •        | •           |                          |            |  |      |
| Rhopoint Sourcing Limited | 47    | •        | •           | •                        | •          | •  | •    |
| RS                        | 11    | •        | •           | •                        | •          | •  | •    |
| TTI, Inc., Europe         | 08    |          | •           | •                        | •          | •  | •    |



| Company                     | Page  | Embedded | Interface | Linear | Logic | Memory | PMIC | Other |
|-----------------------------|-------|----------|-----------|--------|-------|--------|------|-------|
| America II Electronics      | 09,43 | •        | •         | •      | •     | •      | •    |       |
| Anglia Components Ltd       | 07,BC | •        | •         | •      | •     | •      | •    |       |
| Avant Electronics Ltd       | 44    | •        | •         | •      | •     | •      | •    |       |
| Digi-Key Electronics        | 02,06 | •        | •         | •      | •     | •      | •    |       |
| Mouser Electronics          | 10,42 | •        | •         | •      | •     | •      | •    | •     |
| Rapid Electronics           | 12    | •        | •         | •      | •     | •      | •    |       |
| Rhopoint Components Limited | 50    |          |           |        |       |        | •    |       |
| Rhopoint Sourcing Limited   | 47    | •        | •         | •      | •     | •      | •    |       |
| RS                          | 11    | •        | •         | •      | •     | •      | •    | •     |
| TTI, Inc., Europe           | 08    |          |           | •      |       |        |      |       |



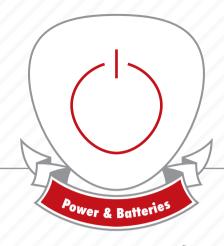
| Company                      | Page  | Redesign Capability | Part Replacement | EoL Notice | Other |
|------------------------------|-------|---------------------|------------------|------------|-------|
| America II Electronics       | 09,43 | •                   | •                | •          |       |
| Avant Electronics Ltd        | 44    |                     | •                | •          |       |
| Electro Enterprises Ltd      | 15    |                     |                  |            | •     |
| FermionX Ltd                 | 24    | •                   | •                | •          |       |
| Mouser Electronics           | 10,42 |                     | •                | •          |       |
| Protronix EMS Ltd            | 30    |                     |                  |            | •     |
| Retronix Ltd                 | 46    | •                   |                  |            | •     |
| Rhopoint Components Limited  | 50    | •                   | •                | •          |       |
| RS                           | 11    |                     |                  |            | •     |
| Speedboard Assembly Services | 21    |                     |                  |            | •     |
| TTI, Inc., Europe            | 08    |                     | •                | •          |       |



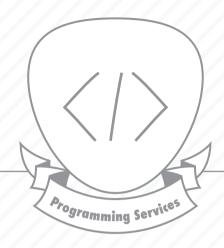
| Company                        | Page  | Capacitors | Ferrite Cores | Filters | Inductors | Resistors | Other |
|--------------------------------|-------|------------|---------------|---------|-----------|-----------|-------|
| America II Electronics         | 09,43 | •          | •             | •       | •         | •         |       |
| Anglia Components Ltd          | 07,BC | •          | •             | •       | •         | •         |       |
| Avant Electronics Ltd          | 44    | •          | •             | •       | •         | •         |       |
| CamdenBoss Ltd                 | 34    |            |               |         |           |           | •     |
| COAX Connectors Ltd            | 59    |            |               |         |           |           | •     |
| Components Bureau              | 49    | •          | •             |         | •         | •         |       |
| Computer Components Ltd. (CCL) | 38    | •          | •             | •       | •         | •         |       |
| Digi-Key Electronics           | 02,06 | •          | •             | •       | •         | •         |       |
| G English Electronics Ltd      | 64    | •          | •             | •       | •         |           |       |
| Jauch Quartz UK Ltd.           | 40    | •          | •             |         | •         | •         |       |
| Kemtron Ltd                    | 32    |            | •             |         |           |           |       |
| Mouser Electronics             | 10,42 | •          | •             | •       | •         | •         |       |
| Rapid Electronics              | 12    | •          | •             | •       | •         | •         |       |
| Rhopoint Components Limited    | 50    | •          |               |         |           | •         |       |
| Rhopoint Sourcing Limited      | 47    | •          | •             | •       | •         | •         |       |
| RS                             | 11    | •          | •             | •       | •         | •         |       |
| TTI, Inc., Europe              | 08    | •          | •             | •       | •         | •         |       |



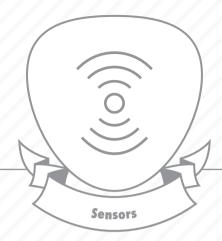
| Company                     | Page  | Design Capabilities | Double Sided | Multi-Layer | Aluminium / Metal Board | Flex / Flex Rigid | Prototyping |
|-----------------------------|-------|---------------------|--------------|-------------|-------------------------|-------------------|-------------|
| America II Electronics      | 09,43 | •                   | •            | •           | •                       | •                 | •           |
| COAX Connectors Ltd         | 59    | •                   |              | •           |                         |                   | •           |
| Digi-Key Electronics        | 02,06 | •                   | •            | •           | •                       | •                 | •           |
| Electrica Limited           | 22    | •                   | •            | •           | •                       | •                 | •           |
| FermionX Ltd                | 24    | •                   | •            | •           |                         | •                 | •           |
| Garner Osborne Circuits Ltd | 53    | •                   | •            | •           | •                       | •                 | •           |
| Photronix                   | 54    | •                   | •            | •           | •                       | •                 | •           |
| Prestwick Cirtcuits GPS Ltd | 52    | •                   | •            | •           | •                       | •                 | •           |
| Protronix EMS Ltd           | 30    |                     |              | •           |                         |                   | •           |
| Rapid Electronics           | 12    | •                   | •            | •           | •                       | •                 | •           |
| RS                          | 11    | •                   | •            | •           | •                       | •                 |             |



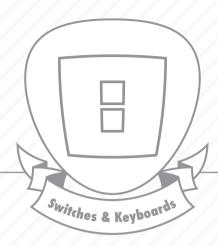
| Company                     | Page  | AC DC Converters | DC DC Converters | Batteries Non-Rechargeab<br>(Primary) | Batteries Rechargeable<br>(Secondary) | Battery Chargers | Battery Holders,<br>Clips, Contacts |
|-----------------------------|-------|------------------|------------------|---------------------------------------|---------------------------------------|------------------|-------------------------------------|
| America II Electronics      | 09,43 | •                | •                | •                                     | •                                     | •                | •                                   |
| Anglia Components Ltd       | 07,BC | •                | •                | •                                     |                                       | •                | •                                   |
| CamdenBoss Ltd              | 34    |                  |                  |                                       | •                                     |                  |                                     |
| Components Bureau           | 49    |                  |                  | •                                     | •                                     |                  |                                     |
| Digi-Key Electronics        | 02,06 | •                | •                | •                                     | •                                     | •                | •                                   |
| DMS technologies            | 56    | •                | •                | •                                     | •                                     | •                |                                     |
| G English Electronics Ltd   | 64    |                  |                  | •                                     |                                       | •                |                                     |
| Jauch Quartz UK Ltd.        | 40    |                  |                  | •                                     | •                                     |                  |                                     |
| Mouser Electronics          | 10,42 | •                | •                |                                       |                                       |                  |                                     |
| Powersolve Electronics Ltd  | 57    | •                | •                | •                                     | •                                     | •                |                                     |
| Prestwick Cirtcuits GPS Ltd | 52    |                  |                  | •                                     |                                       |                  | •                                   |
| Rapid Electronics           | 12    | •                | •                | •                                     | •                                     | •                | •                                   |
| Rhopoint Components Limited | 50    | •                | •                |                                       |                                       | <u> </u>         |                                     |
| Rhopoint Sourcing Limited   | 47    | •                | •                | •                                     | •                                     | •                | •                                   |
| RS                          | 11    | •                | •                | •                                     | •                                     | •                | •                                   |
| TTI, Inc., Europe           | 08    | •                | •                |                                       |                                       |                  | •                                   |



| Company                | Page  | Device Programming<br>Services | Laser Marking | Tape and Reeling |
|------------------------|-------|--------------------------------|---------------|------------------|
| America II Electronics | 09,43 | •                              | •             | •                |
| Anglia Components Ltd  | 07,BC | •                              | •             | •                |
| Digi-Key Electronics   | 02,06 | •                              |               | •                |
| Electrica Limited      | 22    | •                              |               |                  |
| Mouser Electronics     | 10,42 | •                              |               | •                |
| Protronix EMS Ltd      | 30    | •                              |               |                  |
| Rapid Electronics      | 12    | •                              |               | •                |
| RS                     | 11    | •                              | •             | •                |
| Trojan Electronics Ltd | 25    | •                              |               |                  |



| Company                     | Page  | Humidity | Light | Linear & Direction | Magnetic | Movement & Acceleratio | Pressure | Temperature |
|-----------------------------|-------|----------|-------|--------------------|----------|------------------------|----------|-------------|
| America II Electronics      | 09,43 | •        | •     | •                  | •        | •                      | •        | •           |
| Anglia Components Ltd       | 07,BC | •        | •     | •                  | •        | •                      | •        | •           |
| Avant Electronics Ltd       | 44    | •        | •     | •                  | •        | •                      | •        | •           |
| CamdenBoss Ltd              | 34    |          |       |                    |          |                        | •        |             |
| Digi-Key Electronics        | 02,06 | •        | •     | •                  | •        | •                      | •        | •           |
| Mouser Electronics          | 10,42 | •        | •     | •                  | •        | •                      | •        | •           |
| Rapid Electronics           | 12    | •        | •     | •                  | •        | •                      | •        | •           |
| Rhopoint Components Limited | 50    | •        |       | •                  | •        | •                      | •        | •           |
| Rhopoint Sourcing Limited   | 47    | •        | •     | •                  | •        | •                      | •        | •           |
| RS                          | 11    | •        | •     | •                  | •        | •                      | •        | •           |
| TTI, Inc., Europe           | 08    | •        | •     | •                  | •        | •                      | •        | •           |



| Company                   | Page  | Encoders | DIP Switches | Keyboard Caps | Push Button Switches | Rocker Switches | Rotary Switches | Slide Switches | Toggle Switches |
|---------------------------|-------|----------|--------------|---------------|----------------------|-----------------|-----------------|----------------|-----------------|
| America II Electronics    | 09,43 | •        | •            | •             | •                    | •               | •               | •              | •               |
| Anglia Components Ltd     | 07,BC | •        | •            |               | •                    | •               | •               | •              | •               |
| CamdenBoss Ltd            | 34    |          |              |               | •                    |                 | •               |                |                 |
| Components Bureau         | 49    |          |              |               | •                    | •               | •               |                |                 |
| Digi-Key Electronics      | 02,06 | •        | •            | •             | •                    | •               | •               | •              | •               |
| Electro Enterprises Ltd   | 15    | •        | •            | •             | •                    | •               | •               | •              | •               |
| G English Electronics Ltd | 64    |          |              |               | •                    | •               | •               | •              | •               |
| Mouser Electronics        | 10,42 | •        | •            | •             | •                    | •               | •               | •              | •               |
| Rapid Electronics         | 12    | •        | •            | •             | •                    | •               | •               | •              | •               |
| Rhopoint Sourcing Limited | 47    | •        | •            | •             | •                    | •               | •               | •              | •               |
| RS                        | 11    | •        |              |               | •                    | •               | •               | •              | •               |
| TTI, Inc., Europe         | 08    | •        | •            | •             | •                    | •               | •               | •              | •               |



| Company                   | Page  | AC Fans | <b>DC Fans</b> | Fan Accessories | Fan Finger Guards,<br>Filters & Sleeves | Heat Sinks | Thermal Pads & Sheets |
|---------------------------|-------|---------|----------------|-----------------|---|------------|-----------------------|
| America II Electronics    | 09,43 | •       | •              | •               | •                                       | •          | •                     |
| Anglia Components Ltd     | 07,BC | •       | •              | •               | •                                       | •          | •                     |
| Avant Electronics Ltd     | 44    | •       | •              | •               | •                                       | •          | •                     |
| CamdenBoss Ltd            | 34    |         |                |                 |   | •          |                       |
| Digi-Key Electronics      | 02,06 | •       | •              | •               | •                                       | •          | •                     |
| G English Electronics Ltd | 64    | •       | •              | •               | •                                       | •          | •                     |
| Kemtron Ltd               | 32    |         |                |                 |   |            | •                     |
| Micronel                  | 63    |         | •              | •               | •                                       |            |                       |
| Mouser Electronics        | 10,42 | •       | •              | •               | •                                       | •          | •                     |
| Rapid Electronics         | 12    | •       | •              | •               | •                                       | •          | •                     |
| Rhopoint Sourcing Limited | 47    | •       | •              | •               | •                                       | •          | •                     |
| RS                        | 11    | •       | •              | •               | •                                       | •          | •                     |



| Company                      | Page  | Antennas | Modems | Modules | Signal Amplifiers | Other |
|------------------------------|-------|----------|--------|---------|-------------------|-------|
| America II Electronics       | 09,43 | •        | •      | •       | •                 |       |
| Anglia Components Ltd        | 07,BC | •        | •      | •       | •                 |       |
| Avant Electronics Ltd        | 44    | •        | •      | •       | •                 |       |
| Digi-Key Electronics         | 02,06 | •        |        | •       | •                 |       |
| DMS technologies             | 56    | •        | •      | •       | •                 |       |
| Jauch Quartz UK Ltd.         | 40    | •        |        |         |                   |       |
| Mouser Electronics           | 10,42 | •        | •      | •       | •                 |       |
| Rapid Electronics            | 12    | •        | •      | •       | •                 |       |
| Rhopoint Sourcing Limited    | 47    | •        | •      | •       | •                 |       |
| RS                           | 11    | •        |        | •       | •                 |       |
| Speedboard Assembly Services | 21    |          |        |         |                   | •     |
| TTI, Inc., Europe            | 08    | •        |        | •       |                   |       |

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