ELECTRONICS

THE SOURCING **GUIDE 2017**

LECTRONICS L

Access to **6 Million** Products Online

DIGIKEY.CO.UK





more than 6 MILL from over 650 SUPPL

KEY.CO.UK

*A shipping charge of £12.00 will be billed on all orders of less than £33.00. A shipping charge of \$18.00 USD will be billed on all orders of less than \$50.00 USD. All orders are shipped via UPS, Federal Express, or DHL for delivery within 1-3 days (dependent on final destination). No handling fees. All prices are in British pound sterling or United States dollar. Digi-Key is a franchised distributor for all supplier partners. New products added daily. Digi-Key and Digi-Key Electronics are registered trademarks of Digi-Key Electronics in the U.S. and other countries. © 2017 Digi-Key Electronics, 701 Brooks Ave. South, Thief River Falls, MN 56701, USA

Editor's Word

Welcome to The Sourcing Guide

Following its successful launch in 2016, the handy A5-size Sourcing Guide has been updated and reprinted for 2017. Designed to help purchasing professionals find new and alternative suppliers, the free Guide is divided into two distinct sections.



Pages 1 to 61 introduce buyers to a plethora of electronics products and services. Categories include: EMC, Connectors and Cabling, RF Connectors, Contract Manufacturing, Resistors, Enclosures, Passives, Excess Inventory Management, Frequency, ICs and Semiconductors, Obsolescence, PCB, Training, Power and Batteries and Thermal Management.

From page 62 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.



sourcing MM PUBLISHING

Contact

EDITORIAL

Managing Editor: Jon Barrett jonb@electronics-sourcing.co.uk Contributing Editor: Amy Barker amyb@electronics-sourcing.co.uk Editorial & Production: Thomas Smart thomas.smart@electronics-sourcing.co.uk

ADVERTISING

Area Sales Executive: Emma Poole emma.poole@electronics-sourcing.co.uk Director of Sales: Charlotte Morgan charlotte.morgan@electronics-sourcing.co.uk

CIRCULATION

Circulation Manager: Vicky Leary vicky.leary@electronics-sourcing.co.uk Circulation Account Manager: Liz Poole liz.poole@electronics-sourcing.co.uk

DESIGN

Graphic Designer: Jeremy Roberts jeremy.roberts@electronics-sourcing.co.uk

PUBLISHER Mark Leary

mark.leary@electronics-sourcing.co.uk
Office Manager: Denise Pattenden
denise.pattenden@electronics-sourcing.co.uk

Articles appearing in this magazine do not necessarily express the views of the Editor or the publishers. Every effort is made to ensure the accuracy of information published. All rights reserved. No part of this publication may be reproduced or stored in a retrieval system or transmitted in any form without the written consent of the publishers.

Volume 2

MMG PUBLISHING LTD

Suite 2,1-3 Warren Court, Park Road, Crowborough, East Sussex TN6 2QX Tel: +44 (0)1892 613400 Fax: +44 (0)1892 613402 Printed by: Pensord Press Ltd Electronics Sourcing is printed on sustainably sourced paper stock ISSN 2043-9504 © 2017 MMG Publishing Ltd





Contents



Broadline Distribution



EMC Page 13



Connectors & Cabling Page 15



RF Connectors

Page 22

Page 05



Resistors

Page 35



Enclosures

Page 37



Passive Components Page 41

Manufacturing Page 24

Contract





Frequency Page 45



ICs & Semiconductors Page 47



Obsolescence Management Page 50

Excess Inventory Management Page 43



PCBs

Page 53



Training

Page 55



Power & Batteries

Page 57



Thermal Management Page 60

+ company listings pages 62-79



Broadline Distribution

Digi-Key Electronics	06
Anglia	
America II	
RS Components	09
Mouser Electronics	10
TTI Europe	11
Rapid	12

GUSTOMAT Our GUSTOMATE Saying...

"I discover that no matter how common or uncommon the components are, Digi-Key delivers good, fast, and easy...Definitely DIGI-KEY is by far the BEST!!!"

Manufacturer, Digi-Key Customer since 2015



"The Digi-Key website is among the easiest to use of all. Keeps us coming back and it gets better all the time."

Engineer, Digi-Key Customer since 2008

"Digi-Key continues to be my go-to resource, and much of that is due to the very easy online ordering tools and quick responsive customer service. Keep up the great work!"

Engineer, Digi-Key Customer since 2011



0800 587 0991 • 0800 904 7786



6 MILLION PRODUCTS ONLINE | 650+ INDUSTRY-LEADING SUPPLIERS | 100% FRANCHISED DISTRIBUTOR

A shipping charge of £12.00 will be billed on all orders of less than £33.00. A shipping charge of \$18.00 USD will be billed on all orders of less than \$50.00 USD. All orders are shipped via UPS, Federal Express, or DHL for delivery within 1-3 days (dependent on final destination). No handling fees, All prices are in British pound sterling or United States dollar. Digi-Key is a franchised distributor for all supplier partners. New products added daily. Digi-Key and Digi-Key Electronics are registered trademarks of Digi-Key Electronics in the U.S. and other countries. © 2017 Digi-Key Electronics, 701 Brooks Ave. South, Thief River Falls, MN 56701, USA



- Amplifiers & Comparators Analog & Power Clocks & Timers
- Data Converters Diodes & Rectifiers Signal Conditioning
- Interface & Transceivers
 MEMS & Sensors
 Motor Control
- Power Management Transistors Protection Devices Reset & Supervisor.
 - Switches & Multiplexers
 Thyristors (SCR) & AC Switches
- Wireless Connectivity
 Microcontrollers
 Memories & Digital IC's

ALL AVAILABLE FROM STOCK

anglialive

www.anglia-live.com







In addition to our supply chain services, cost-saving programs, and inventory solutions, *America II provides a wide range of franchise lines* for industries ranging from telecommunications, industrial and lighting to healthcare, automotive and military.



Antistat



mouser.co.uk

The Newest Products for Your Newest Designs®



The widest selection of the newest products.

Over 4 million products from over 600 manufacturers.

Authorised distributor of semiconductors and electronic components for design engineers.





The Specialist in Electronic Component Distribution















OMRON



#Standex

TUSONIX





DELPHI









Panasonic









BOURNS





























































Weidmüller 3€







Not in the catalogue? Above our end column? Not a problem! We welcome the chance to beat your current prices by quoting you on volume orders, sourcing items from our suppliers' extended ranges or those not available in our product catalogue. We will hold quotes for 30 days, protecting you against future price rises. Contact our dedicated quotes team today to save money on large quantities. Alternatively using our online quotation service could not be easier.

www.rapidonline.com/Quotation · Quotes@rapidonline.com · 01206 751166



















helping you make it



EMC





Connectors & Cabling

Electro Enterprises	16
Telegartner UK Ltd	17
PEI Genesis	18
Binder	19
DAU Components	20
Fischer	21



Specialists in Electrical and Electronic Component Distribution

Global Value-add Facility - all AS9100C and QPL Approved

KITTING * TERMINAL BOARDS * MARKING * CONNECTOR and PC TAIL CONNECTOR ASSEMBLY

BUILD TO PRINT * FIBRE OPTIC CASE ASSEMBLY * VENDOR MANAGED INVENTORY and CONSIGNMENT

MILITARY PACKAGING, LABELLING and BAR CODING





eurosales@electroenterprises.com www.electroenterprises.com +44 (0) 1909 56 55 50



BEST CONTACTS FOR YOUR SUCCESS





Telegärtner UK - "We don't just want good quality. We want to be better & provide our customers with excellent solutions that work successfully for them."

Cable Assemblies - Telegärtner UK has an excellent reputation for providing high quality, competitively priced cable assemblies for variety of market sectors, such as telecommunications, industrial, medical, broadcast and marine. With 30 years of experience in a wide range of markets, our expertise can be utilised to offer custom made assemblies according to customer requirements.

www.telegaertner.co.uk/contact

Telegärtner UK

Unit 1 - A1(M) Business Centre 151 Dixons Hill Road Welham Green, AL9 7JE Tel: +44 01707 636600 Fax: +44 0 1707 636638

E-Mail: sales@telegaertner.co.uk

WHEN THE DESIGN MATTERS

PEI-Genesis DELIVERS

- · Expert engineering design services
- Custom connector and cable solutions for harsh environments

Challenge us to solve your most complex interconnect problems

www.peigenesis.com +44 (0) 23 8062 1260





Why wait?



Delivered from stock in 24 hours

- M8 and M12 sensor connectors
- Field attachable and moulded connectors
- Receptacles

Finally, a reversible USB Type A 2.0 connector

It is amazing that, in 2017, there is still no reversible USB A port in common use.

Although Type-C connectors promise to end the one-way-only frustration, they have yet to be adopted in any meaningful way with most applications still using Type A for the foreseeable future.

With the introduction of our Reversible female socket, DAU Components is pleased to be able to offer a usable solution. Our USB Type A 2.0 port is available in both horizontal and vertical PCB orientation, making it suitable for most applications. Furthermore, the device is no bigger than a normal non-reversible Type A.

We are particularly proud of this reversible USB following a positive response from some of our biggest customers who can now offer a product range with the obvious advantage of having a reliable and reversible USB A port. Unsurprisingly, the vast majority of the engineers we have offered samples to have said yes.

DAU Components: USB's (Universal Serial Buses)

USB 2.0A Connector USB 3.0 Connector USB 3.1 Connector USB Type .C.

Features of the USB 2.0 A

Standard Electrical spec: 500mA / 5V.

480Mbps.

Assembly type: Through hole, SMT.

Female Receptacle - Straight – Right Angled- Vertical. Standard body or short body with edge grip – crimping. UL94V-0 Rated Insulator material.

Typical applications: Hard drives, printers, cameras,

smartphones etc.

Features of the USB 3.0 A

Standard Electrical spec 1.5A / 5V. Assembly type: Through hole, SMT.

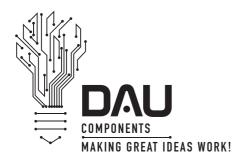
Female Receptacle - Straight - Right Angled - Vertical -

DIP Reversible.

UL94V-0 Rated insulator material.

Typical applications: Keyboards, monitors, printers,

gaming consoles etc.







Features of the USB 3.1 A

Standard Electrical spec: 5A / 20V.

Gen .1. = 5Gbps. Gen .2. = 10Gbps.

Assembly type: Through hole.

Female Receptacle - Straight - Right Angled - Vertical -

DIP Reversible.

UL94V-0 Rated insulator material.

Typical applications: Flash drives, smartphones, printers,

monitors etc.

Features of the USB - C

Standard Electrical spec: 3A/5V / 12V.

Power Delivery: 5A/20V (Max).

 $\ensuremath{\textbf{USB-C}}$ is a reversible directional host to device, they can

be inserted either way around- upside down etc.

Enhanced EMI and RFI.

Min of 10,000 insertions.

Can be used for display interface as Display port, VGA, HDMI.

www.dau-components.co.uk

DAU Components Limited 68-74 Barnham Road, Barnham, West Sussex, PO22 0ES, UK Phone: +44 (0)1243 553031

Fax: +44 (0)1243 553860

Email: sales@dau-components.com

INNOVATIVE CONNECTIVITY

SOLUTIONS



Build more **reliable devices** when you choose Fischer Connectors for **circular connectors** and **cable assembly solutions**.

Proven in fields requiring **reliability**, **precision** and **faultless quality**, our vast range of **electrical** and **optical connector solutions** are engineered to operate under some of the most demanding environmental conditions.

- Industrial instrumentation
- Measuring and testing devices
- Broadcast

- Medical equipment
- Military forces
- Telecommunications



THE RELIABLE FXPERT



RF Connectors







Contract Manufacturing

Speedboard Assembly Services	25
Elite Electronic Systems Limited	26
Protronix EMS Ltd	27
Corintech	28
Electrica Limited	29
JJS Manufacturing	30
Trojan Electronics Ltd	31
DJ Assembly	32
M-TEK Ltd	33
Jaltak Systoms	24



- · Sustainable electronic manufacturing through partnership
- · Delivering complex PCB assembly & turnkey solutions
- · Dedicated customer focus teams
- · Quality assured & passionate about continuous improvement
- Manufacturer of the year 2016 Elektra Awards





electronic systems limited

In tune with all of your manufacturing requirements

Your partner for electronic manufacturing solutions:

- PCB Assembly
- Cable & Wiring Assembly
- Complete Systems Assembly
- Customised Test Solutions

- Global Procurement
- Worldwide Logistics
- Design for Manufacture & Test
- State of the Art Technology



- Tel: +44 (0)28 6632 7172
- @ Email: info@elitees.com
- www.elitees.com







Protronix EMS

Your Partner for Contract Electronics Manufacturing

- Total Product Assembly
- Fast-EST PCB Prototyping
- Cable & Harness Assembly
- NPI & DFM Support
- Automated SMT
- Global Purchasing Power
 - Warehousing & Logistics
 - Management
- UKAS ISO9001 Approved
- O IPC-A610 Class 3
 - Established 30 years

Serving many diverse sectors including safety critical & Hi-Rel environments

SPECIAL OFFERI

Mention this advert and pay no tooling charges against your first order*

*Terms and conditions and

Contact Us

Protronix EMS Ltd, Cross Street, Luton, LU2 0DP Phone: +44(0)1582 418490 Email: sales@protronix.co.uk www.protronix.co.uk

corintech Creative Technology



Your Electronics Manufacturing Partner

PCB Assembly including SMT and Through-hole

Electronic Product Assembly

Competitive Purchasing

Thick Film Hybrids

Automated Test

UK & Offshore

Rapid Turnaround

Value Engineering

Design & Prototyping

AS9100 - ISO9001 - IPC-A-610 Class 3

Visit **www.corintech.com**Call **01425 655655**Email **info@corintech.com**



Electronic Design and Manufacturing Services



- Full Product Design •
- Altium PCB Layout •
- Solidworks 3D Enclosure Design
 - ARM & Microchip Firmware Development
 - PC & Android Software Development
 - SMT & Through Hole Assembly
 - Full Box Build Assembly
 - Rapid Prototyping •
 - Test & Inspection Services
 - Global Sourcing •
 - Full Batch Traceability •





Electrica Limited

Unit 14, Charles Street, Dukinfield, Cheshire, SK16 4SG

- 0161 343 7575
- Sales@electricalimited.com
- electricalimited.com

Contract Manufacturing

MANUFACTURING

BOX BUILD ASSEMBLY



CABINET BUILD



CABLES AND WIRING LOOMS



ELECTRO-MECHANICAL ASSEMBLY



PCB ASSEMBLY



UK AND CZECH FACILITIES



jjsmanufacturing.com

The workhorse of the Electronics Industry

Surface Mount & Through Hole Assembly
 Cable and Electro-mechanical Assembly
 Full Box Build and Test

Inspection utilising Mirtec AOI Design, Prototype & Fast Turnaround

Small to Medium Batch Production
 Free Issue or Procurement of Parts

Lead Free and Leaded Assembly
 Full Traceability to Military Standards

Tel: 01792 469020 • Email: sales@trojanelectronics.co.uk • www.trojanelectronics.co.uk Trojan Electronics Ltd. Kings Dock, Trojan Close, Crymiyn Bufrows Swan Contract Manufacturing



DJ Assembly is one of the UK's leading providers of electronic manufacturing services, specialising in small-to-medium sized production runs, high-quality PCB assembly and prototyping. From initial design, through to procurement, prototyping and beyond, we can help bring your project to life.



- Low to Medium Volume Production Runs
 Whether you require a prototype or larger production runs,
 we can provide a service to fit your schedule.
- Vith ISO 9001 Accredited & Quality Guarantee
 With ISO 9001 and our 1 Year Quality Guarantee, you can be assured your products are made to the highest standard.
- Manufactured in the UK
 All of our products are manufactured in the UK, by IPC trained professionals.
- Worldwide Component Sourcing
 We have over 175,000 line items in stock
 and access to a further 10 million
 worldwide.



High Quality Turnkey Assembly & Test Requirements? Call +44 (0) 1189 455377

sales@mtek.co.uk

rnkey Product Manufacturing Partner Full Procurement, Assembly, Programming, X-Ray & Test Services Specialist Electronic Tu

- 21 years of experience in high mix, high value PCB and product assemblies
- A reputation for consistently delivering quality and reliability
- The capacity to grow with customer needs and requirements
- High commitment to manufacturing excellence with on-going investments in innovation and talent
 - Competitive pricing with fast turnaround
- manufacturing serviceServing a wide customer base operating in a myriad of vertical markets and industries











DOUBLE SIDED & MIXED TECHNOLOGY PCB ASSEMBLIES RAPID PRODUCT PROTOTYPING NPI SERVICE <u>FR4 POLYIMIDE FLEX-RIGID HIGH TG MULTI LAYER PCBs PACKAGE ON PACKAGE (PoP) PROGRAMMING</u> & TESTING SERVICES (HALT, ESS, FLYING PROBES, BOUNDARY SCAN, GOEPEL, JTAG, ICT, RF TESTING & GPS EMULATION) 3D X-RAY & IPC-A-610D COMPLIANCE INSPECTION SERVICE AOI INSPECTION **DESIGN FOR MANUFACTURE** WITH COPLANARITY LASER MODULE CABLE HARNESSES & ELECTRO-MECHANICAL ASSEMBLIES SMALL to volume production capabilities complete box assemblies & product support global PROCUREMENT FOR BAREBOARDS, COMPONENTS & METALWORKS,

BS.EN. ISO 9001:2008 • BS.EN. ISO 14001-2004 • IPC-A-610D (Class 3+) • IPC/WHMA-620 • IPC-7711/7721



Jaltek Systems Ltd

Delivering solutions through technology and partnership



Working with Customers to create history

Jaltek is a leading electronics technology solutions provider, offering a comprehensive range of vertically integrated design and manufacturing services tailored to meet our customer's highly diversified business requirements.

We offer a tool box of solutions which can either be utilised as a fully integrated solution or a single service. From conceptual design and NPI, through manufacturing and test of PCBA's, to final product realisation, Jaltek supports products through-out their complete lifecycle.

www.jaltek.com













- · 3 SMT lines
- Dedicated NPI Line
- · Vapour Phase
- Selective Solder with IPC-A-610 Class 3 workmanship
- · Conformal Coating
- · Manual Assembly
- Cable Assembly
- Pressfit
- · Extensive test suite
- · State-of-the-art 2D/3D inspection technology
- · Box-build & High Level Assembly
- · System Integration





t +44 (0) 1582 578170 f +44 (0) 1582 578171

Unit 13, Dencora Way, Sundon Park, Luton, Bedfordshire, LU3 3HP



Resistors









RESISTOR SPECIALIST

Legacy Distribution Ltd has been an independent franchised distributor of electronic components, specialising in the supply of Optoelectronic, Interconnect & Passive electronic components, since 1995.

Working with a small number of professional manufacturers, we are able to supply complete component solutions for a wide range of applications, whilst maintaining the highest levels of service and product quality you come to expect from us.



RESISTORS -LEADED

- · Anti-surge wire-wound
- · Ceramic wire-wound
- Metal glaze
- Open frame current sense
- · Power flat alloy
- Power metal film
- · Precision metal film
- · Vitreous enamelled wire-wound

RESISTORS -SURFACE MOUNT

- · SMD Anti-surge
- · SMD Anti-sulfurated
- SMD Automotive AEC-Q200
- SMD Current sense
- · SMD High power
- · SMD Pulse withstanding
- · SMD Thin film precision
- · SMD Ultra-low Ohm

RESISTORS -INDUSTRIAL

- · Aluminium case high power
- · Aluminium case multi value · Aluminium clad wire-wound
- · Cement radial terminal
- · Ribbon power-wound

CAPACITORS

· Ceramic multi-layer

Ceramic SMD

· Plastic film

 Suppression · SMD & dipped tantalum

Snan-in

· Ceramic trimmer

· Thermal fuse wire-wound

RESISTORS -VARIABLE

- · Cermet trimmer
- · SMD trimmer
- Wirewound

VARISTORS

- Metal oxide varistor
- TMOV

THERMISTORS

- · Ceramic PTC thermistor
- NTC thermistor
- · Temperature sensor

ARRESTERS

· Gas discharge tube

OPTOELECTRONIC

- Multi-colour LED 7-Segment display
- LED cluster
- · Dot matrix LED
- · LED bar & strip

CIRCUIT PROTECTION

- ESD suppressor
- In-rush current limiter · Pico fuse
- Power fuse
- · PPTC resettable fuse









For more information or further details on our extensive product range, call us today on +44 (0)1243 268131 or email us sales@legacydistribution.co.uk

legacydistribution.co.uk









Enclosures

Lincoln Binns Ltd	38
Stego UK Ltd	39
Reechcraft Ltd	40

Lincoln Binns.

ELECTRONIC ENCLOSURE SPECIALISTS

MADE IN BRITAIN



- Aluminium Electronic Enclosures Various lengths and widths available
- Plastic Electronic Enclosures
- 19" Rack Panels and 19" Rack Enclosures
- Diecast Electronic Enclosures
- Extrusion Design & Manufacture





Call Lincoln Binns today for expert advice and competitive pricing

01403 860915

www.lincolnbinns.com











Prototype

Manufacture



STEGO 'the protector of electronics' have developed a new filter fan series. This series has a more effective airflow and significantly increases air volume, thanks to its unique air-flap outlet technology, and only one filter mat. But there is more ...

TAKE A LOOK AT ALL PRODUCT HIGHLIGHTS:







"Beechcraft are pleased to provide free technical advice concerning PU applications, styling design proposals and costings, as well as cosmetic and structural ideas to enhance your specific application: just give us a call..."



Large instrument cover utilising a 10 part-tool to create a curvaceous and daring design.



Beechcraft

U MOULDINGS & DESIGN

Beechcraft Ltd, Westfield Industrial Estate, Midsomer Norton, Radstock, Somerset BA3 4BS Email: enquiries@beechcraft.co.uk Tel: (01761) 416642

www.beechcraft.co.uk



Passive Components



Supplying Products Globally

- Serving a wide range of industries
- High level of technical and commercial support
- Efficient stocking and distribution operation

for more than 20 Leading Manufacturers ...



www.rhopointcomponents.com
01342 330470

PRECISION ELECTRONIC COMPONENTS, PRESSURE & TEMPERATURE SENSORS, CONNECTORS



Excess Inventory Management

CASH IN ON YOUR **EXCESS STOCK!**

Trading Specialists can help you achieve financial return for your excess inventory. We'll buy or consign your excess electronic component inventory, freeing up valuable warehouse space, removing administrative costs from your business and, most importantly giving you an instant cash injection.

Send your excess stock in 3 easy steps!

- Simply send your stock list to excess@trading-specialists.com
- Our industry experts will assess your stock list and send over our best price.
- We'll discuss payment and delivery options that best suit your company, PLUS we'll cover all shipping costs!







Frequency





RELIABLE AND SAFE: FREQUENCY PRODUCTS FROM JAUCH









- Quartz crystals
- Crystal oscillators
- MEMS oscillators

Frequency control products from Jauch are produced and configured according to the highest quality standards. Thus, they reliably set the pace even under extreme conditions.



YOUR ADVANTAGE:

Knowledgeable, UK based technical support on hand to assist you in the design process and samples readily available for your design.

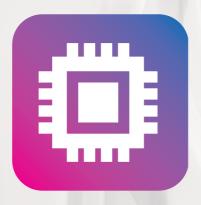
Frequency Control and Battery Technology





Jauch Quartz UK Ltd. Frimley, Surrey, GU16 7SG

phone: 01276 605900 email: sales@jauch.co.uk www.jauch.co.uk



ICs & Semiconductors

Mouser Electronics	48
America II Flectronics	49



James needs access to the newest products for his company's latest design. That's why he orders from Mouser, the semiconductor and electronic component selection leader with the top brands engineers know and trust. All available in prototype to production quantities and ready to ship same day.

Suddenly James is exerting a lot more authority around the office.



Authorised Distributor



Call 01494 467490 or visit mouser.co.uk



YOUR NEW SOURCE FOR INTEGRATED CIRCUITS & SEMICONDUCTORS



America II provides supply chain solutions

Our unparalleled global staff of sales representatives, purchasing agents, and component engineers, along with our strategic partnerships, deliver an exceptional supply chain that exceeds our customers' needs.

One of the World's Largest Distributors

America II partners with the top global manufacturers and serves as a primary supplier for OEM and EMS customers around the world. With 4 billion parts in stock and ready to ship, America II is one of the world's largest distributors of semiconductors and electronic components.





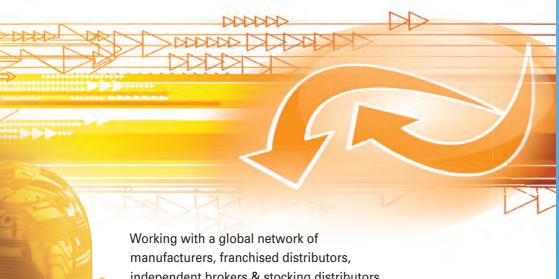
Obsolescence Management

Rhopoint Sourcing	51
Cycolos Electronics	52



Specialists in sourcing hard to find, long lead time, end of life & obsolete components.

- Active, passive and electromechanical components
- Genuine components sourced Full test house facilities available
- All parts subject to in depth visual inspection
- Full transparency Up to 12 month product guarantee
- Scheduled ordering
 Excess stock management



Working with a global network of manufacturers, franchised distributors, independent brokers & stocking distributors and have access to OEM/CEM's excess stock holdings to source the products you need.

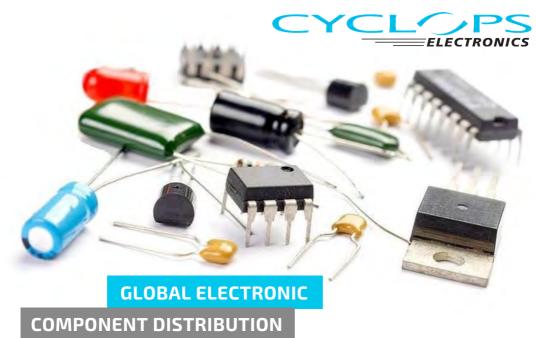
www.rhopointsourcing.com

sales@rhopointsourcing.com

T: +44 (0) 1342 330495







With 177,232 stocked line items and access to over 14 million more, we are one of the largest independent electronic component stocking distributors.

Operating worldwide in 8 countries, our expansive network means that we can source locally and ship globally eliminating any purchasing issues, allowing our customers to buy with confidence every day.

HARD TO FIND

177.232 STOCKED LINE ITEMS

You can check availability on shortage and current electronic through our extensive online

COMBATING COUNTERFEITS

are a big concern for our customers, that's why we have strict anti procedures in place to prevent your

QUALITY GUARANTEE

We're so confident in our supplier network that if the



www.cyclops-electronics.com





+(44) 01904 415 415











PCBs



Looking for help in sourcing PCB's???

Use the team at Prestwick to help.





Prestwick Circuits GPS Ltd

I Steadman Place Riverside Business Park Irvine KAII 5DN, UK +44 1294 224631

pcb@prestwickgps.com www.prestwickgps.com



Training













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



Power & Batteries

Jauch Quartz UK Ltd	58
Olson Electronics Ltd	59





RELIABLE AND SAFE: BATTERY SOLUTIONS FROM JAUCH



- Battery packs
- Lithium batteries
- Transportation and certification know-how (UN, UL, IEC, ATEX)

Jauch provides complete solutions for your battery system - from simple standard cells to intelligent lithium battery packs.

>>

YOUR ADVANTAGE:

Knowledgeable, UK based technical support on hand to assist you in the design process and samples readily available for your design.

Frequency Control and Battery Technology





Jauch Quartz UK Ltd. Frimley, Surrey, GU16 7SG

phone: 01276 605900 email: sales@jauch.co.uk www.jauch.co.uk

CELEBRATING 55 YEARS

IBUTION



olsondirect.co.uk









Thermal Management













Trusted for our quality and high standard of products and services since 1975, G. English Electronics Limited (GELEC) provide a complete range of parts, including Award Winning Sunon fans, plastics, metal castings, keypads and electromechanical components. With offices and warehousing in the UK, China and Hong Kong, we are ideally situated to support our customers and suppliers on a global scale.

SUNON FANS





KEYPADS











CUSTOM METAL PARTS



Broadline Distribution

Company	Page	Total nunti	er of line	is Cor	der välde välde Col	and call	ing third and and an area	ing Leds	Joshtes Free	Helici M	and Self-	and Passer	ide of the Control of	genent ganents	Wet and Prof	gateries Sens	g Service Sors Swi	es Tures ar	d Keybe	ands solutions
America II Electronics	8	350	0			•	•	•	•	•		•	•	•	•	•			•	
Anglia Components Ltd	7	1,000,000	0			•	•	•				•			•	•				
Cyclops Electronics Ltd	52	144,576	£100																	
Digi-Key Electronics	6	700	0																	
Electro Enterprises Ltd	16	1,000,000	£25																	
Mouser Electronics	10	1,000,000	03																	
Rapid Electronics	12	130,000	03											•						
RS	9	550,000	£0																	



Connectors & Cabling

			ale Conner	date Card	dge Connec	Gonnecion	on the Capter	a Cables	a Connect	ars The Conductor	T Cables Course	ctors actors	Blocks
Company	Page	Backg	Barrel	Carde	D'Sul	ice fibre	Nodii	Hodu	Multi	le Rectar	ngt Rf Col	inectors Termin	al Blocks
America II Electronics	8	•			•								
Anglia Components Ltd	7	•	•		•					•	•	•	
Binder UK Ltd	19												•
Cyclops Electronics Ltd	52	•				•	•		•	•	•	•	
DAU Components	20	•	•			•	•		•	•	•	•	
Digi-Key Electronics	6	•		•	•		•		•		•		
Electro Enterprises Ltd	16	•	•	•			•		•		•	•	
Fischer Connectors Ltd	21					•			•		•		
G. English Electronics Ltd	61						•	•	•		•		
M-TEK (Assembly) Ltd	33	•	•	•	•	•	•	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•	•	•	•	•	•	•	
OLSON Electronics Limited	59												•
PEI-Genesis	18	•			•	•	•	•		•	•	•	
Prestwick Circuits GPS Ltd	54												•
Rapid Electronics	12	•	•	•	•	•	•	•	•	•	•	•	
Rhopoint Components Ltd	51	•		•				•		•		•	
RS	9	•	•	•	•	•	•	•	•	•	•	•	
Speedboard Assembly Services	25												•
Telegartner UK Ltd	17	٠	•	•	•	•	•	•	•	•	•	•	



Contract Manufacturing

					rnessing	Pility		at lines	Repair and
Company	Page	BEACA	ROX BUIL	d Cattle at	nd Harnessing	Capability Prototy	ding Surface	Mount Lines Through Life	Repair and the
Corintech Ltd	28								
Cyclops Electronics Ltd	52		•		•	•			
DJ Assembly	32	•	•		•	•	•	•	
Electrica Ltd	29	•	•	•	•	•	•	•	•
Electro Enterprises Ltd	16			•					
Elite Electronics	26	•	•	•	•	•	•	•	•
Jaltek Systems Ltd	34	•		•	•	•	•	•	
JJS Manufacturing	30	•	•	•		•	•	•	
M-TEK (Assembly) Ltd	33	•		•			•	•	•
Protronix Industrial Services	27	•		•	•	•	•	•	
Speedboard Assembly Services	25	•		•			•	•	
Trojan Electronics Ltd	31	•	•	•	•	•	•	•	



Displays & LEDs

		Display Moduli	let lighting	Specific	Standolfs acc
Company	Page	Diek	ĮĘŪ	IED.	Other
America II Electronics	8	•	•	•	
Anglia Components Ltd	7	•	•	•	
Binder UK Ltd	19		•		
Cyclops Electronics Ltd	52	•		•	
Digi-Key Electronics	6	•	•	•	
G. English Electronics Ltd	61	•			
M-TEK (Assembly) Ltd	33	•	•	•	
Mouser Electronics	10		•	•	
Prestwick Circuits GPS Ltd	54		•		
Rapid Electronics	12	•	•	•	
RS	9	•	•	•	



EMC

			Cable Cable	Finger String.	sacrets and conductive and conductiv	ive Tape Condi	ives Silicof Conducti Conducti	nes raticoli Gaskets Gaskets	let Footh	and Caple Gift	ands indone	, d Cotes	Panels
Company	Page	Beryli	Jun Calife	Shie. Condi	Condi	Condu	Conduct Coroan	Gask	cine food	ed Co	ed Windows	and Cores	dion Panels
America II Electronics	8		•	•	•	•	•		•		•		
Anglia Components Ltd	7										•		
Electro Enterprises Ltd	16		•	•	•	•			•				
G. English Electronics Ltd	61					•					•		
Kemtron Ltd	14	•	•	•	•	•	•	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•			•		•		
PEI-Genesis	18		•						•				
Prestwick Circuits GPS Ltd	54												•
Rapid Electronics	12		•						•		•		
RS	9	•	•	•	•	•	•	•	•	•	•	•	



Enclosures

Company	Page	neskto	Den de la	eri elle di Ra	I tronsite	Sanding End	Delies and English	es Cases Republication	ICK Mount	d Sealed Eric	Justific Heart	nes dhe
Company	ruge	Ť	·	Ť			*	Ť	·			
America II Electronics	8	•								٠		
Anglia Components Ltd	7	•	•	•		•	•	•	•	•		
Beechcraft Ltd	40	•	•	•	•	•	•	•	•	•	•	
Digi-Key Electronics	6	•	•	•		•						
G. English Electronics Ltd	61	•				•	•		•			
Lincoln Binns Ltd	38	•	•	•	•	•	•	•	•	•	•	
M-TEK (Assembly) Ltd	33	•	•	•	•	•	•	•	•	•	•	
OLSON Electronics Limited	59	•			•			•		•		
PEI-Genesis	18			•					•			
Rapid Electronics	12	•	•	•		•	•	•	•	•		
RS	9	•	•	•	•	•	•	•	•	•		
Stego UK Ltd	39	•	•	•	•	•	•	•	•	•	•	



Excess Inventory Management

Company	Page	Lat value Blats	the the late the
America II Electronics	8		· ·
America ii Electronics	°	•	•
Cyclops Electronics Ltd	52	•	•
Electro Enterprises Ltd	16	•	•
Jauch Quartz UK Ltd	46	•	•
M-TEK (Assembly) Ltd	33	•	•
Trading Specialists	44	•	•



Frequency Management

					Restrate		vizoniched Gechler	gr ⁽⁵⁾
Company	Page	Crystals	Oscillator	Programi	Resonate	VCOS traffe	ions Acido	Other
America II Electronics	8	•	•	•	•	•		
Anglia Components Ltd	7	•	•	•	•	•	•	
Cyclops Electronics Ltd	52	•	•	•	•	•		
Digi-Key Electronics	6	•	•	•	•	•		
Jauch Quartz UK Ltd	46	•	•	•				
M-TEK (Assembly) Ltd	33	•	•	•	•	•		
Mouser Electronics	10	•	•	•	•	•	•	
Rapid Electronics	12	•	•	•	•	•		
RS	9	•	•	•	•	•		



ICs & Semiconductors

Company	Page	Embedde	id Interface	Linear	Logic	Menory	PHIC	Other
America II Electronics	8		•			•	•	
Anglia Components Ltd	7	•	•	•	•	•	•	
Cyclops Electronics Ltd	52	•	•	•	•	•	•	
Digi-Key Electronics	6	•	•	•	•	•	•	
M-TEK (Assembly) Ltd	33	•	•	•	•	•	•	•
Mouser Electronics	10	•	•	•	•	•	•	•
Rapid Electronics	12	•	•	•	•	•	•	•
RS	9	•	•	•	•	•	•	•



Obsolescence Management

Company	Page	ane
America II Electronics	8	
Cyclops Electronics Ltd	52	•
Electro Enterprises Ltd	16	•
JJS Manufacturing	30	•
M-TEK (Assembly) Ltd	33	•
Mouser Electronics	10	•
Rhopoint Sourcing Ltd	51	•
RS	9	•
Speedboard Assembly Services	25	



Passive Components

Company	Page	Capacitors	, Ferrite Cut	es Fillers	Inductors	Residuts	Other
America II Electronics	8	•					·
Anglia Components Ltd	7	•	•	•	•	•	
Cyclops Electronics Ltd	52	•	•				
Digi-Key Electronics	6	•	•	•			
G. English Electronics Ltd	61		•	•			
Jauch Quartz UK Ltd	46	•	•	•	•	•	
Kemtron Ltd	14		•				
Legacy Distribution	36					•	
M-TEK (Assembly) Ltd	33	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•	
Prestwick Circuits GPS Ltd	54	•	•		•	•	
Rapid Electronics	12	•	•	•	•	•	
Rhopoint Components Ltd	51	•				•	
RS	9	•	•	•	•	•	



PCBs

		,c ^c	de de la company	nuti lav	e ^t mu	A Metal Boards	A. Ridd Produkyli	, s
Company	Page	Desig.	Double	Multir	Alumi	Flex	Protoc	Other
America II Electronics	8	•	•	•	•		•	
Digi-Key Electronics	6		•	•	•			
DJ Assembly	32	•	•	•	•	•		
M-TEK (Assembly) Ltd	33	•	•	•	•	•		
Prestwick Circuits GPS Ltd	54		•	•	•	•		
Rapid Electronics	12		•			•		
RS	9				•			



Power & Batteries

				.6	Rechargeable	natue ahle		,ev
Company	Page	Kelece	de de ce	Herers W. Batteries W.	II. Recliede de les	charge and Ratery C	Raiders Fried Hold	differ differ
America II Electronics	8	•	•	•				
Anglia Components Ltd	7	•	•	•	•			
Digi-Key Electronics	6	•	•	•	•	•		
G. English Electronics Ltd	61	•		•	•	•		
Jauch Quartz Uk Ltd	58			•	•	•		
M-TEK (Assembly) Ltd	33	•	•	•	•	•		•
Mouser Electronics	10	•	•					
OLSON Electronics Limited	59	•	•	•	•	•		•
Prestwick Circuits GPS Ltd	54			•				
Rapid Electronics	12	•	•	•	•	•		
RS	9	•	•	•	•	•		



Programming Services

		agrant	ring	s á	ing
Company	Page	desirent and desired to the second	laser Martino	Tape and Ree	Other
America II Electronics	8				
Anglia Components Ltd	7		•	•	
M-TEK (Assembly) Ltd	33		•	•	
Mouser Electronics	10			•	
RS	9		•	•	
Trojan Electronics Ltd	31				



Sensors

			ction	greet Household Recording to the Children			
Company	Page	Linear &	Magnetic Magnetic	Moverte	Pressure	Terriperal	ditte.
America II Electronics	8	•	•	•	•	•	
Anglia Components Ltd	7	•	•	•	•	•	
Digi-Key Electronics	6	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•	
PEI-Genesis	18				•	•	
Rapid Electronics	12	•	•	•	•	•	
Rhopoint Components Ltd	42	•	•	•	•	•	
RS	9	•	•	•	•	•	



Switches & Keyboards

Company	Page	DIPSWIFE	hes Pushfutes	Rockersy	nitches Rotary Sv	niches Side Swi	Toggle Su	litethes Other
America II Electronics	8	•	•	•	•	•	•	
Anglia Components Ltd	7	•	•	•	•	•	•	
Cyclops Electronics Ltd	52	•	•	•	•	•	•	
Digi-Key Electronics	6	•	•	•	•	•	•	
Electro Enterprises Ltd	16	•	•	•	•	•	•	
G. English Electronics Ltd	61		•					
M-TEK (Assembly) Ltd	33	•	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•	•	
Rapid Electronics	12	•	•	•	•	•	•	
RS	9		•	•	•	•	•	



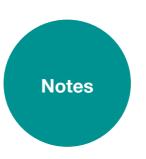
Thermal Management

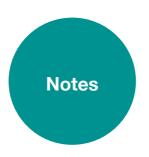
					Saries Failings at	Jands es	s (ade. Sheets
Company	Page	AC Faits	DC Faits	Fan Acces	Fall times an	A Sile Heat Sith	Thernal	Other
America II Electronics	8	•	•	•	•	•	•	
Anglia Components Ltd	7	•	•	•	•	•	•	
Digi-Key Electronics	6	•	•	•	•	•	•	
G. English Electronics Ltd	61	•	•	•	•	•	•	
Kemtron Ltd	14						•	
M-TEK (Assembly) Ltd	33	•	•	•	•	•	•	
Mouser Electronics	10	•	•	•	•	•	•	
Rapid Electronics	12	•	•	•	•	•	•	
RS	9	•	•	•	•	•	•	

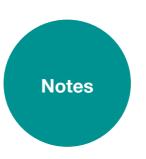


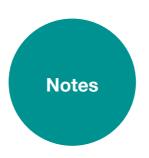
Wireless Solutions

		Artentes	Moderns	Modules	şigra Angi	iffers .
Company	Page	Ante	Mode	Mode	Signi	Officer
America II Electronics		•				
Anglia Components Ltd		•	•	•	•	
Digi-Key Electronics		•	•	•	•	
M-TEK (Assembly) Ltd		•	•	•	•	
Mouser Electronics		•	•	•	•	
Rapid Electronics		•	•	•	•	
RS		•		•	•	
Speedboard Assembly Services						•











AHEAD OF WHAT'S POSSIBLE™

Building for Future Technology



Offering world-class analog & RF products across the full signal chain with UK inventory, from anglia

- Amplifiers ADC DAC Audio Video IC's Clocks & Timers
- High Speed Logic Interface & Isolation Linear IC's MEMS
 - Optical IC's Power Management Processors & DSP
 - RF & Microwave Sensors & Switches Multiplexers



www.anglia-live.com