GCT

Product
Catalogue

Issue 27

USB | SIM | Board to Board | FFC/FPC | Mod Jack | MicroSD | DC Jack | Cable Assemblies

Contents

Latest Products

USB1086
Ultra-High mating cycle USB 3.0 Type A connector.

USB4151
Vertical-mount USB Type-C plug with compact footprint.

SIM8065
Ultra-compact nanoSIM connector with card detect functionality.

USB1125
USB A with short body shell for compact designs.

Engineering electronic connectors for tomorrows technology

GCT has been pioneering the very best in electronic interconnects and cable assembly solutions for over 30 years. With an extensive product range, companies the world over trust us to enable connectivity within their designs. Our drive for product innovation has led to unique connectors that help customers with specific requirements, ensuring they stay at the forefront of their industries.

Connector solutions engineered to the highest standard

We understand that connections are critical for all electronics. Our products undergo stringent testing and certifications to ensure they are reliable and of the highest quality, giving you every confidence that your finished product will perform at its very best. GCT products are compliant across a broad selection of standards and are manufactured to industry and regulatory principles.

RoHS COMPLIANT 2011/65/EU Deca-BDE

URS — ISO 9001 — URS is a member of Registrar of Standards (Holdings) Ltd.

U.K.A.S MANAGEMENT SYSTEMS 043

RoHS COMPLIANT 2015/863/EU Phthalates

UR

ECHA **REACH** compliant

A dedicated team to help you from concept to production

You will always receive a quick, responsive and personal service when working with us, guaranteed. This has always been the reason we continue to build a list of customers who continue to trust our products every time. We firmly believe in our industry-leading service levels to create the best possible experience for those designing in connectors.

Getting GCT connectors into your designs couldn't be easier

To make your design process simpler, we provide a wealth of supporting tools and materials to ensure you choose the best possible solution for your application, quickly and easily. From instant 3D model generators to PCB footprint layouts, to datasheets and express samples, our aim is to provide everything you need to get the job done. And if you need further assistance, the team is always on hand to provide addition information.

30+
Years Experience

500m+
Products Sold

15,000+
Customers

USB

A comprehensive selection of USB connectors are available with various combinations of form factors, interface and version types, vertical and horizontal configurations, as well as unique new Type-C charging options and IP-rated waterproof micro USBs.

Chances are GCT have the right USB connector for you.

Key Specifications

- **4 form factors** - Full Size, Mini, Micro, & Type-C
- **4 interfaces types** - A, B, AB, and Type-C
- **3 USB versions** - 2.0, 3.0, 3.1
- **Shell stake** and **locating peg** options
- **Horizontal** and **vertical** options
- **IP67 water/dust proof** and **charging-focused** options

Applications

Consumer Electronics
Personal Computing
Docking & Charging
Instrumentation
IT & Networks
Data & Telecoms

Range Highlights

Unique Solutions	Rated to 20,000 mating cycles	Super short body USB A	Vertical USB C plug with tiny PCB footprint	Enhanced PCB stability vertical micro USB	Dual stack USB A
	New - USB1086	New - USB1125	New - USB4151	New - USB3180	USB1035
USB Type-C	USB4050	USB4055	USB4060	USB4065	USB4070
Micro USB	USB3070	USB3090	USB3155	USB3160	USB3150
Full Size USB	USB1015	USB1110	USB1115	USB1030	USB1061

gct.co/usb

Environmentally sealed Micro USB connectors

aquanex®

- **Waterproof** to **IP67 -** submersible to **1 metre** for **30 minutes**
- **Silicon Seal** moulded to the connectors profile
- Nickel plated, **metal injection moulded** stainless steel shell
- **10,000 mating cycles**
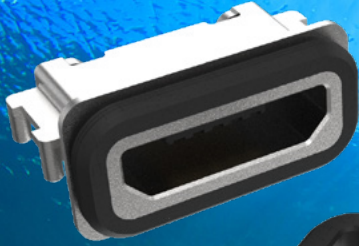
USB3500
Mid-top mount
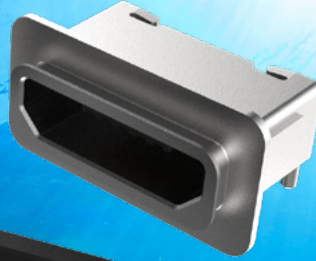
USB3505
Top mount

gct.co/aquanex

USB C Connectors for charging applications

ionex®

- **USB Type-C** interface - rated up to **5A**
- **16 pin** configuration - **economical price** closer to Micro USB
- **10,000 mating cycles** - perfect for **charging & docking** applications
- **USB 2.0** functionality

USB4110
Surface mount

USB4105
Hybrid mount

USB4085
Thru-Hole mount

gct.co/ionex

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Board to Board
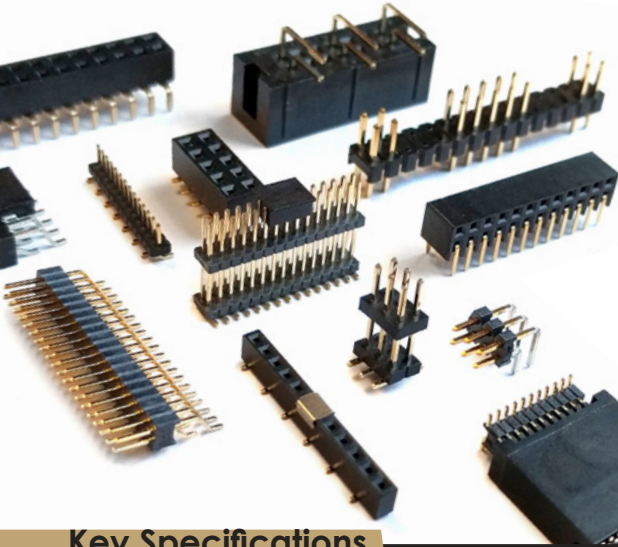
High quality and competitively priced PCB connectors for any situation. A large element of customisation is possible with pitches ranging from 0.8mm to 5.08mm, selectable pin lengths, and insulator heights. Other features include locating peg options, shrouding, polarisation, keyed or elevated headers and sockets, with completely bespoke solutions possible (see page 6).

Key Specifications

- Near **limitless** configuration possibilities
- **Pitch options** from **0.80mm** to **5.08mm** *(.031" to .200")*
- **Customisable pin lengths** and **insulator heights**
- **Elevated, shrouded,** and **polarised** types
- **Insulator material & colour** and **plating material** options
- Perfect for **parallel, horizontal** or **right angle** PCB mating

Applications

Automotive
IT, Data & Telecoms
Electronic Systems
Personal Computing
Consumer Electronics
EPOS Systems

Range Highlights

	0.8x1.2mm	1.00mm	1.27mm	2.00mm	2.54mm	3.96/5.08mm
Headers	BB080	BC020	BD020	BF036	BG030	3.96mm - BH010
		BC034	BD095	BF030	BG075	5.08mm - BK010
Sockets	BB060	BC065	BD075	BF120	BG140	3.96mm - BH015
	BC085	BD064		BF112	BG230	5.08mm - BK015

See the full range online at
gct.co/b2b

4 GCT

SIM card connectors for Nano (4ff), Micro (3ff) and Mini (2ff) SIM cards conform to GSM11.11 standards. As one of the first-to-market with the nano SIM connector, GCT is always at the forefront of innovation in this category.

The latest SIM8065 features a push-push card insert/eject mechanism and card detect switch all within a tiny Nano SIM compatible footprint.
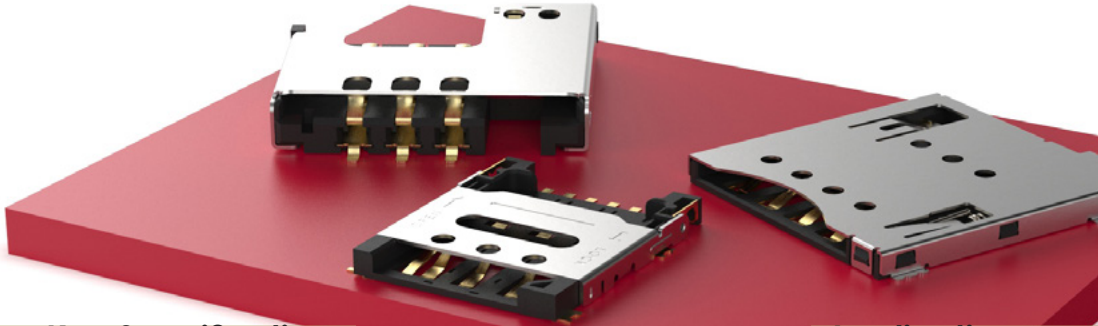
Key Specifications

- **3 form factors** - Mini, Micro & Nano
- **3 card insertion styles** - Push-Pull, Push-Push & Hinged
- **Dual stack** SIM6050 model available
- **6 or 8 contact variants** depending on application
- **Card Detection (CD) switch** and **locating peg** options

Applications

Data & Telecoms
Consumer Electronics
Asset Tracking
Smart Metering
IoT Applications
EPoS Systems

Full Range

Ultra-low cost, gold flash plated contacts	Smallest Nano with CD switch	Hinged Nano with CD switch	Push-Push Nano with CD switch	**Nano**
SIM8051	SIM8055	New - SIM8060	New - SIM8065	
SIM7050-6	SIM7050-8	SIM7100	SIM7200	**Micro**
SIM5051	SIM5055	SIM5060-6	SIM5060-8	**Mini** Hinged
SIM2055	SIM2070-6-1	SIM2070-6-0	SIM4065	SIM6050	**Mini**

Custom Connectors

GCT specialise in custom connectors allowing you to meet specific application design requirements and budgets. Whether it's a modification of an existing part or a brand new design, we will assist you along every step of the way.

Below are some examples of our custom solutions. Be sure to find out more about these projects at www.gct.co/custom-connector

Custom modular jack from concept to production in just 8 weeks

Custom mating PCB and over-molded cable connector solution for door entry system

Custom cable assemblies to meet impending taxi legislation

Need a custom solution for your project? Get in touch now.

gct.co/contact-us

Custom Cable Assemblies

GCT has you covered when it comes to custom cable assemblies too, including overmold, IDC (Insulation Displacement Cable), discrete wire/crimp harnesses and cable looms. GCT provides guaranteed quality, great value and superior service.

Overmold

Overmolded cables are often used to solve application issues and GCT has helped many customers overcome design problems by offering innovative solutions. Key advantages of GCT's overmolded product range are the low MOQs and low tooling cost threshold. Target delivery for custom design first off samples is six weeks. Full **UL** certification capabilities are also available.

IDC

GCT produces great value custom IDC assemblies, from simple point to point insulation displacement connector cables to daisy chain and breakout cables. GCT offer both industry-standard branded connectors, and high-quality, low-cost alternatives.

Crimped

Crimped assemblies are used in both signal and power applications, often as part of a wire to board system design. This type of design allow cables to connect to a printed circuit board by use of a female connector terminated to cable.
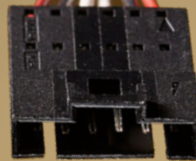
Flat Flex Connectors
& Cable

GCT's FFC/FPC range of products offer a one-piece component solution with no need for male and female connectors and labour intensive cable assemblies, providing lower cost and easier procurement.

Key Specifications

- **3 pitch** options - **0.3, 0.5** & **1.0mm** *(.012" .019" & .039")*
- **3 entry types** available with **slide** or **flip** locking options
- **Zero insertion force** locking actuator holds cable in place
- **Limitless** connector & cable configurations possible
- **Cable shielding** and **folding** options available

Applications

Consumer Electronics
Wireless Base Stations
Photocopiers
Scanners
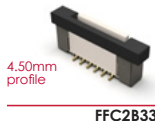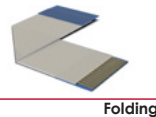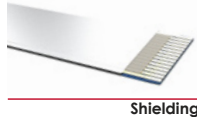**Printers**

Full Range

0.3mm Pitch

1.00mm profile
Bottom contact
FFC1B06

1.0mm Pitch

2.50mm profile
Bottom contact
FFC3B07

2.50mm profile
Top contact
FFC3B11

0.5mm Pitch

1.00mm profile
Dual contact
FFC2B28

2.00mm profile
Dual contact
FFC2B27

2.60mm profile
Dual contact
FFC2B29

2.24mm profile
Dual contact
FFC2C05

4.25mm profile
FFC2A32

4.50mm profile
FFC2B33

2.00mm profile
Top contact
FFC2B16

2.00mm profile
Bottom contact
FFC2B21

Flat Flex Cable Capabilities

6-80 contacts (0.5mm)

4-50 contacts (1.0mm)

Shielding

Folding
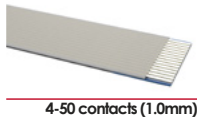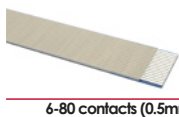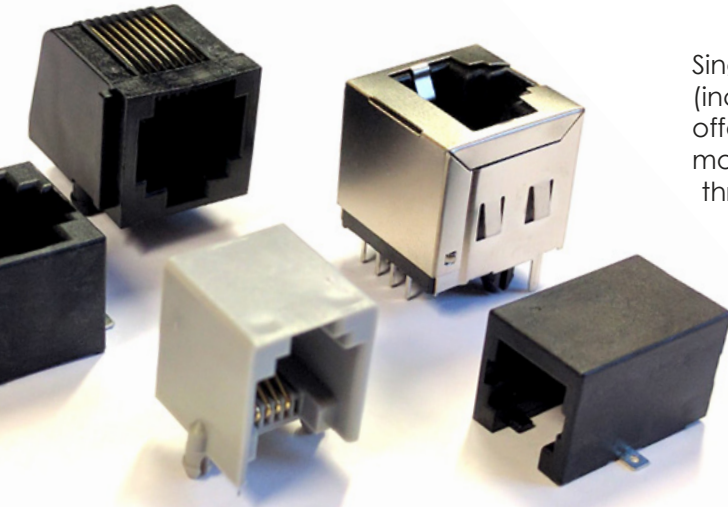
Modular Jacks

Single port Modular Jack (including RJ45) connectors offer vertical and horizontal mounting in both SMT and through hole technologies.

Full Range

MJ3105-62	MJ3105-64	MJ3105-66	MJ3105-88	MJ3115-88	**Through-Hole** Vertical
	MJ3305-44	MJ3305-66	MJ3310-66	MJ3310-88	**SMT** Vertical
	MJ3205-66	MJ3215-64	MJ3215-66	MJ3215-88	**Through-Hole** Horizontal
MJ3405-66	MJ3405-88	MJ3410-44	MJ3410-66	MJ3410-88	**SMT** Horizontal
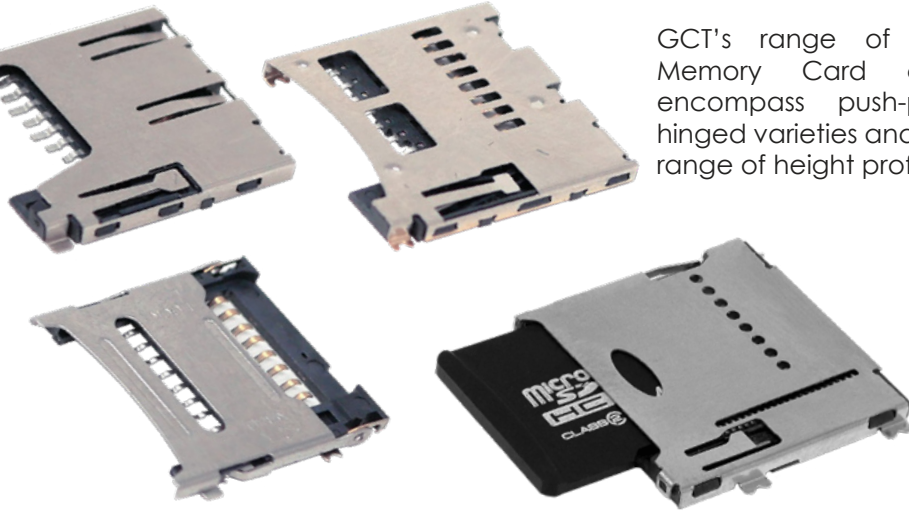
MicroSD Memory

GCT's range of Micro SD Memory Card connectors encompass push-push and hinged varieties and come in a range of height profiles.

Key Specifications

- **Micro SD** card compatible
- **2 card insertion styles -** Push-Push & Hinged
- **Profiles** from **1.40mm** to **1.95mm** *(.055" to .077")*
- **Card detection switch** options
- **Locating peg** options

Applications

Consumer Electronics
Digital Cameras
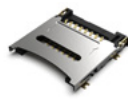**Phones & Tablets**

Full Range
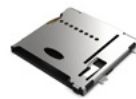
MicroSD

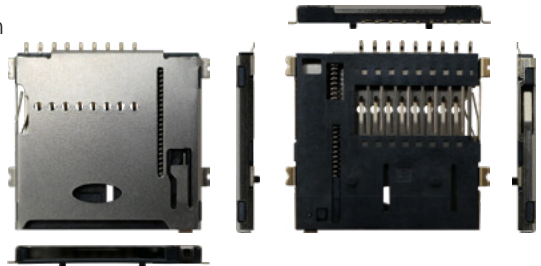MEM2051   MEM2061   MEM2067   MEM2075

Ultra Slim MEM2075

1.40mm profile - just 0.4mm thicker than the card itself

- **Card detection switch** - normally open
- **Push-Push** card insertion/ejection
- **-25 to +85 C** operating temp. range
- **Stainless steel** shell and latch
- **5000 mating cycles** durability
- **Locating peg** for SMT stability

gct.co/connector/mem2075

DC Power Jacks

The GCT range of DC Power Jacks come in a variety of different sizes to meet your requirements. Available in popular 0.65, 2,00, 2.35 and 2.50mm pin diameters.

- **Multiple parts** to suit different design specifications
- **Horizonta**l and **vertical** orientations
- **Jack pin diameters** from **0.65** to **2.50mm** *(.026" to .098")*
- **9 Insulator colour** options
- **Shielded** & **unshielded** versions
- **4** current ratings, including **7** and **8 amps** for high current

Applications

Consumer Electronics
Charging Devices
IT Peripherals

Full Range

				DCJ065-05	DCJ065-15
					2.5 Amp
DCJ200-05	DCJ200-10	DCJ235-05	DCJ250-05	DCJ250-10	**5.0 Amp**
				DCJ250-15	**7.0 Amp**
				DCJ250-20	**8.0 Amp**

Resources & Support

From part drawings and 3D CAD files to quick quotations and live chat with our sales & engineering experts, the GCT website hosts a wealth of information and resources.

Head to **gct.co** on PC, tablet or smartphone for a smooth and secure browsing experience.

www.gct.co

Technical Documentation

- Detailed PDF product & packaging drawings
- Specification & testing documents
- Latest product updates & information

Instant 3D Model & PCB Footprint Layout Files

- 3D model builder. Universal & software-specific file formats available
- PCB footprint layout & schematic symbol files
- Export to Altium, Cadence, OrCAD, Eagle & others

Quick Quoting & Express Sampling

- Online part number builder
- Live chat with our Sales & Engineering experts
- 72 hour sampling on select ranges

Custom Connector & Cable Assembly Capabilities

- Bespoke connector designs from concept to creation
- Custom plating, insulator colours, voided pins, blanked cavities
- Overmolded, IDC, Crimp & custom cable assembly options

Local Support with a Global Footprint

- GCT sales locations in Europe, the Americas, and Asia
- Worldwide distribution partners
- Fully compliant with RoHS, REACH, & the Conflict Minerals program

A Global Footprint

Products can be sourced directly from **GCT** or through our extensive global distribution network.

GCT Locations

📍 **Boston** MA, USA
+1 978 208 1618
sales@gct-americas.com

📍 **London** UK (HQ)
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sales@gct-europe.com

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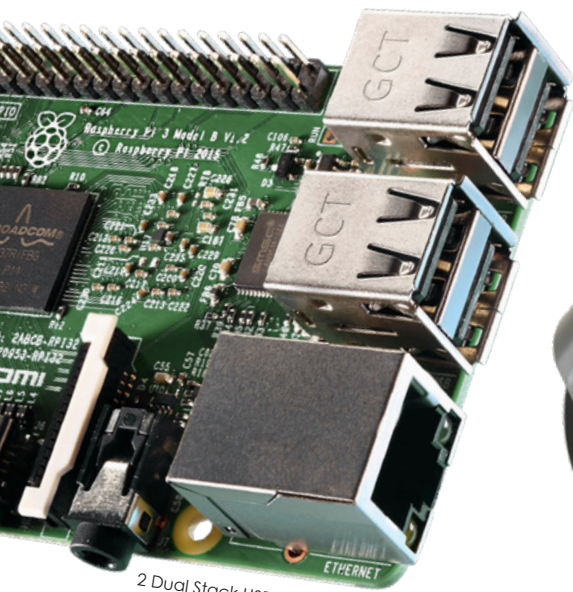
📍 **Singapore** SG
+65 8322 2263
sales@gct-apac.com

London
Boston
San Jose
New Delhi
Hong Kong
Singapore

Global Distribution Partners

FUTURE ELECTRONICS   Digi-Key ELECTRONICS   Newark   Farnell   element14

Find your local distributor
www.gct.co/rep-distributor

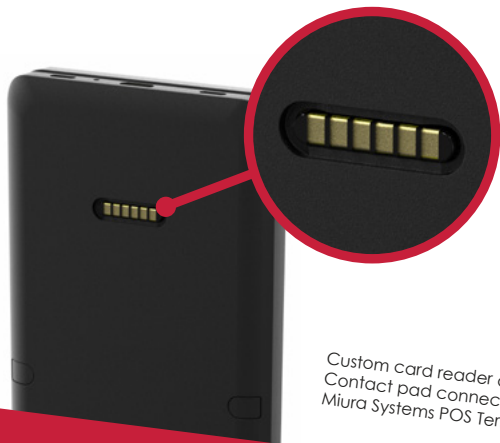Or make an enquiry
www.gct.co/contact

2 Dual Stack USB A - USB1035
on the Raspberry Pi 3 Model B+

USB Type-C - USB4055
on premium headphones

Have you seen what we're in?

Custom card reader and
Contact pad connectors on
Miura Systems POS Terminal

www.gct.co