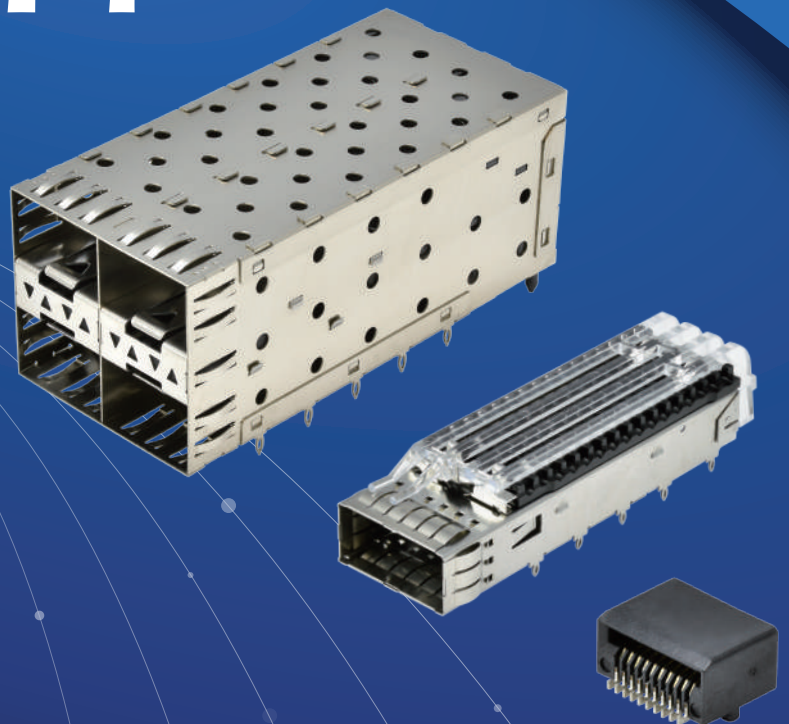




詮欣股份有限公司
CHANT SINCERE CO., LTD.

SFP/QSFP

Cage
Assembly
Connector





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About Chant Sincere



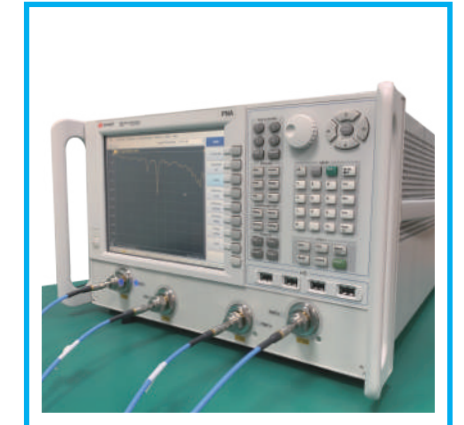
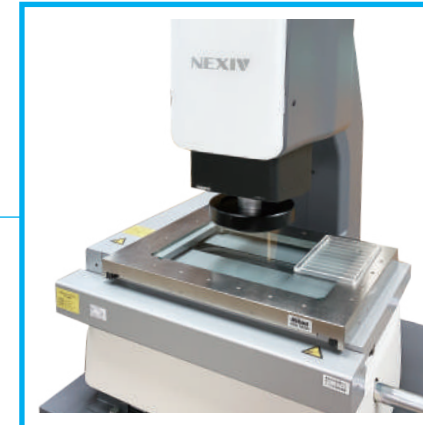
- **Chant Sincere Co., Ltd.** was set up in 1985., With the management concept of “Honest, Innovative, Quality, Longterm” to design and manufacture connector and cable. Keep developing new innovative products and integrating vertically from R&D, tooling, assembly and quality control to meet the demands (quality/cost/delivery) from customers. Chant Sincere Co., Ltd. has been constructing various of product families to provide a total solution to customers.
The connector and cable products are widely used in many different application , such as Computing, Industrial & Automation, Telecommunication, Automotive, Waterproof, Consumer and Medical Industry.

- **Chant Sincere** won the “National Bedrock Award” & “Small Giant Award” from Taiwan Connector maker competition and got many “Best Supplier Awards” from Global customers. We are focusing on improving our design and manufacture technology, and we have been applying for a lot of international patents for our products including I/O connector, Board to Board Connector, Waterproof Connector, Industrial Connector, Automotive Connector, Memory Card Connector and Adaptor, High Speed connector/cable (USB3.1), Audio & Vidio connector and cable (HDMI,Display Port)...etc.
Chant Sincere Co., Ltd. has been growing up as a global professional manufacturer for connector and cable.

The Core Competence of Chant Sincere Co.,Ltd. including.

- Over 36 Years Manufacture Experience
- ODM/OEM Capability
- Vertical Integration (Design, Tooling, Manufacturing, Test)
- Automation Capability
- Precise Tooling Center
- Wide Range of Product Line
- Systematic Testing Process
- Customized Capability
- Quality System (ISO,IATF)
- National Awards Rising Sun Awards/Best Supplier Awards

ISO13485
IATF16949
ISO14001
ISO9001



Quality Systems

COXOC Quality Assurance department meets our customers' quality requirements by practicing continual improvement in our quality assurance processes and increasing customers' satisfaction in the quality of our products.

The effectiveness of COXOC QA operation is certified by well-known organizations such as ISO9001 Quality Assurance Management System, ISO 14001 Environmental Management System, ISO/IATF 16949 for Automobile Industry Quality Management System, and ISO13485 Medical Devices Quality Management System, COXOC integrated supply chain and devoted staff has enabled us to build a solid foundation and core capability to better serve our customers. It is COXOC principal to always meet and exceed customer expectation by providing superior products and services. COXOC ultimate goal is to create value for our customers by building collaborative and mutually beneficial relationships.

Competencies & Technology

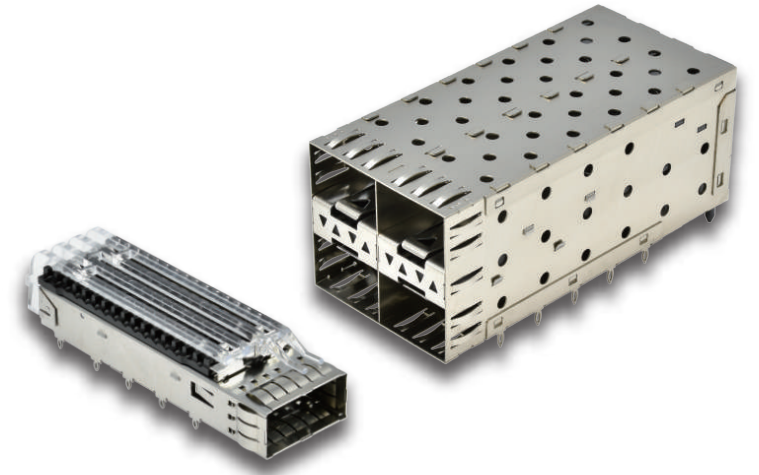
The R&D Center at Chant Sincere leads the industry in research, design, and manufacturing of numerous key parts. This center has successfully developed for both wired and wireless solutions for computer peripherals, communication systems, and automobiles/industrial/medical equipment. Our solid R&D team formed a strong foundation in advance manufacturing technology and superior quality control that also enabled high value adding service for customers.

USB type C connectors is an example of the fruits of our research. This miniature and unidirectional interface provides many useful functions such as lighting data transfer rate up to 10 Gbits/s, DP ALT Mode high-definition video signal support, and brilliant 100W charging capability. Chant Sincere advanced the research further into higher specs such as USB 3.2 and USB 4.0 and offers customized solution for various of industrial applications. We delivered comprehensive solutions in bridging the diverse need for new interface and solve on-going product design issues for customers.

QSFP-DD is an ultra-fast interface that transmit data at 400Gbps speed. At this speed, stringent requirement for signal integrity and operating temperature is inviable which imposed huge challenges for the industry. At Chant Sincere, we implemented comprehensive computational software, state of art measuring equipment and eminent R&D capability to aid the solution delivering process. The analysis process includes simulation under CST MSW (Time Domain Simulation), ANSYS HFSS (Frequency Domain Simulation) for signal integrity as well as real-time measurement using test boards and PNA (up to 43.5GHz) to deliver quality reports for signal integrity (S-parameter, Gain compression, conversion gain/loss, noise level). We further performed simulation of its operating temperature using Icepak (Heat transfer and fluid flow simulator). This enabled the performance optimization for heat dissipation solution. With the above R&D skills we successfully delivered the desired professional service within the shortest time frame for our customers.



SFP/QSFP



SFP Application

- The small form-factor pluggable (SFP) is a compact, hot-pluggable network interface module used for both telecommunication and data communications applications. The form factor and electrical interface are specified by a multi-source agreement (MSA) under the auspices of the Small Form Factor Committee.[1] It is a popular industry format jointly developed and supported by many network component vendors.

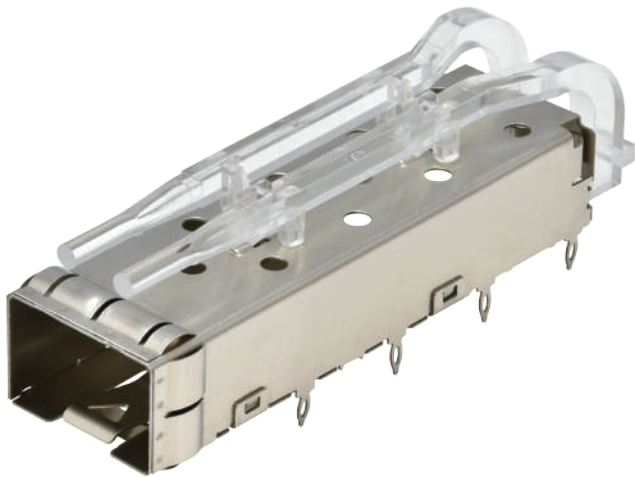
Application

- Server
- Switch
- Storage
- Router

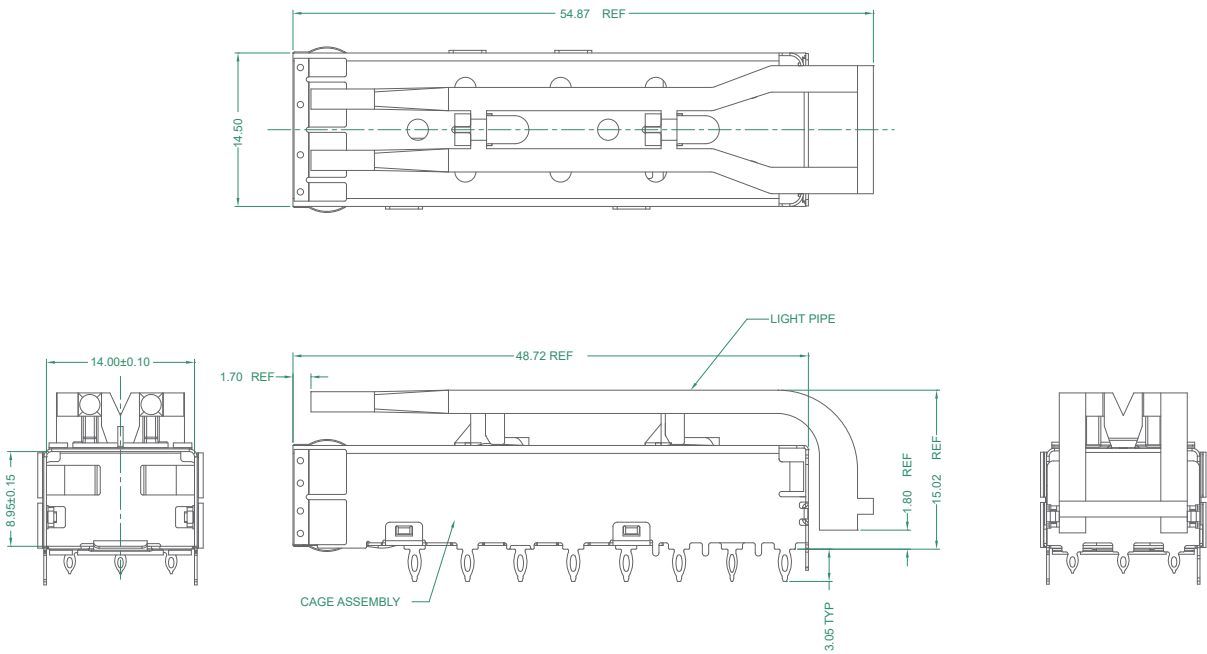
Product Characteristics

- SFPs instead of fixed interfaces (e.g. modular connectors in Ethernet switches) are that the interface port can be equipped with any suitable type of transceiver as needed.
- Supporting SONET, Gigabit Ethernet, Fibre Channel, PON, and other communications standards.
- A slightly larger sibling is the four-lane Quad Small Form-factor Pluggable (QSFP). The additional lanes allow for speeds 4 times their corresponding SFP. The QSFP28 variant was published allowing speeds up to 100 Gbit/s.
- SFP Types- 1 Gbit/s SFP , 10 Gbit/s SFP+, 25 Gbit/s SFP28.
- QSFP types- 4 Gbit/s QSFP, 40 Gbit/s QSFP+, 100 Gbit/s QSFP28.

SFP+ Cage



Drawing



Specification

Description	SFP+ Cage, 1X1, PressFit, EMI Spring, with Light Pipe	
Part no.	902GEA1P01C2N0A0	
Material	Cage Assembly	Copper Alloy.
	EMI Springs	Copper Alloy.
	Light Pipe	PC, Clear.
Finsh	Cage Assembly	Nickel Plated.
	Mates with SFP MSA Compliant Transceivers.	
	Minimum PC Board Thickness	Single Sided =1.50 mm
	Operating Temperature	-55°C to +85°C
	Litht Pipe Shipped Unassembled to Cage Assembly.	
	Cage Assembly to be Pressed into The PCB Prior to Attaching the Light Pipe to The Cage.	
	This Part Meets The Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2011/65/Eu).	

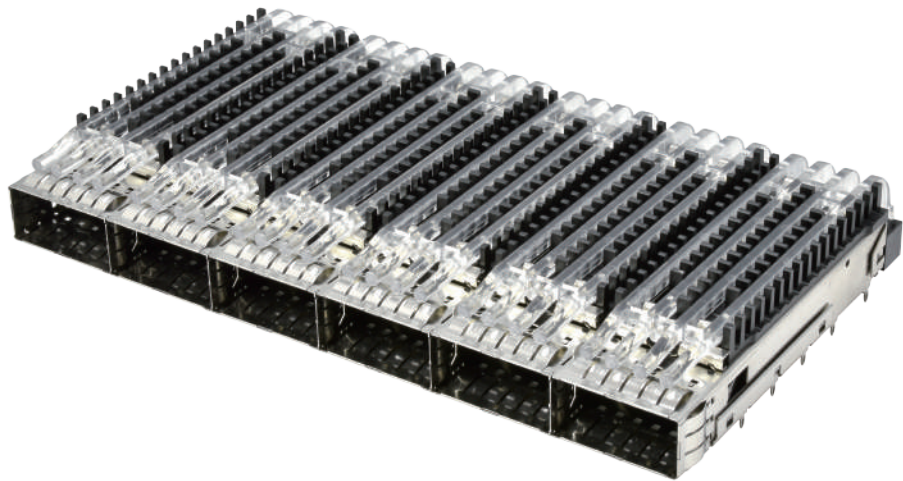
SFP Cage

Photo	Port no.	Part no.	Type
 1X1 Solder Type	1X1	902AEA1S00C100A0	Solder
	1X2	902AEA2P00C100A0	
	1X4	902AEA4P00C100A0	
 1X4 Solder Type	1X6	902AEA6P00C100A0	Solder
	1X1	902GEA1SF0C100A0	
	1X2	902GEA2P00C100A0	
 1X1 PressFit	1X4	902GEA4P00C100A0	PressFit
	1X6	902GEA6S00C100A0	
	1X2 PressFit		

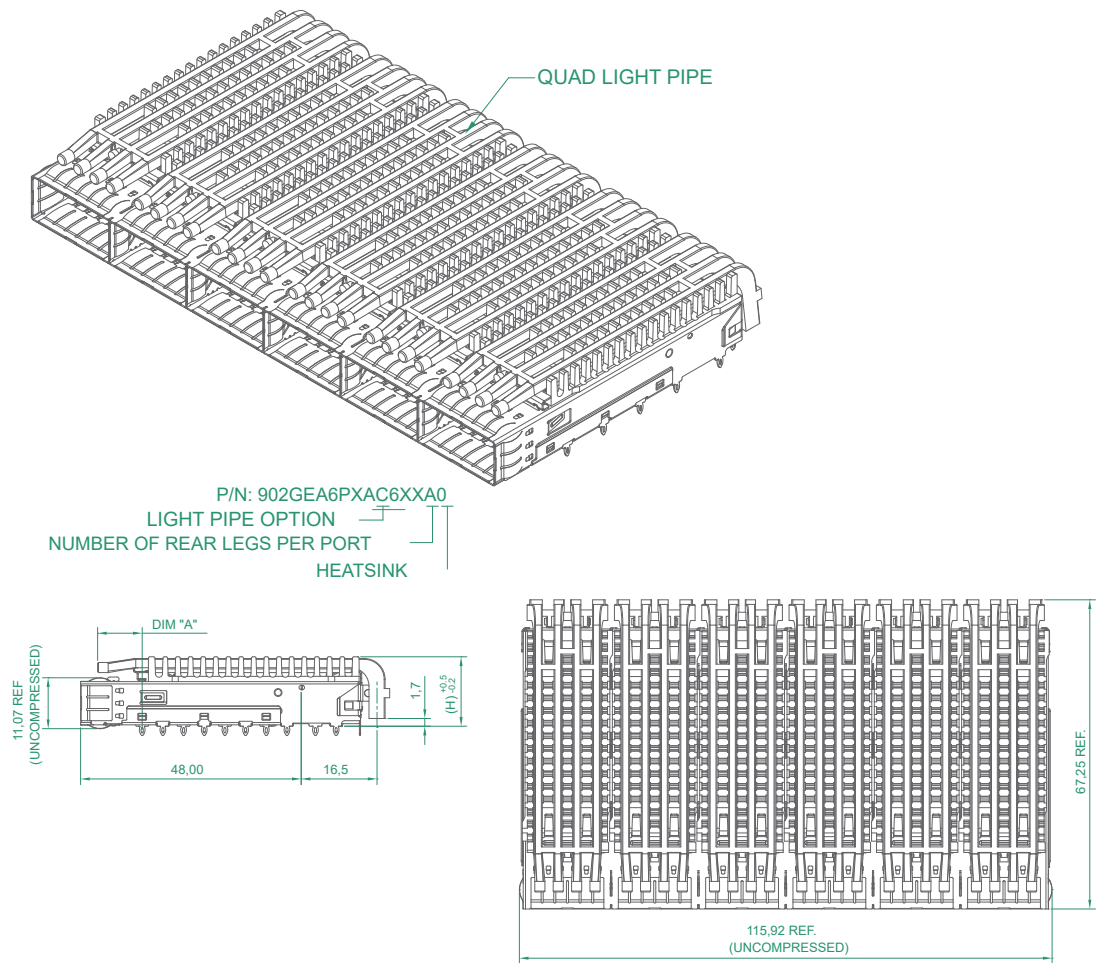
SFP+ Cage

Photo	Port no.	Part no.	Type
 Heat Sink, EMI Spring	1X1	902AE11SK0C200C0	Solder
	1X2	902AEA2P00C2A0A0	
	1X4	902AEA4P00C200A0	
 EMI Spring	1X6	902AEA6P00C2A0A0	Solder
	1X1	902GEA1SF0C100A0	
	1X2	902GEA2P00C100A0	
 Light Pipe, EMI Gasket	1X4	902GEA4P00C100A0	PressFit
	1X6	902GEA6S00C100A0	
	1X6 PressFit		

■ QSFP+ Cage



■ Drawing




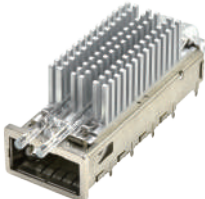
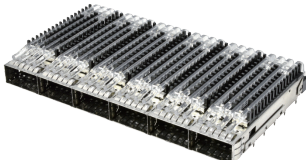
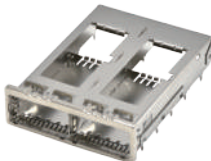

■ Specification

Description	QSFP+ Cage, 1X6, Through Bezel, Quad Light Pipe, PCI Heat Sink	
Part no.	902GEA6PXXC61XA0	
Material	Cage Up	Stainless Steel, 0.25 Thickness
	Cage Down	Stainless Steel, 0.25 Thickness
	Partition	Stainless Steel
	Emi Fingers	Stainless Steel
	Heatsink	Aluminum
	Heatsink Clip	Stainless Steel
	Light Pipe Materia	Clear Polycarbonate
Finsh	Body Cage	Cleaning
	Emi Spring Finish	Cleaning and Hole Sealing
	Heatsink Finish	Black Anodized
	Heatsink Clip Finish	Cleaning
	Mate with QSFP MSA Compatible Transceiver.	
	Inside Surface of Casket when Fully Compressed.	

■ QSFP+ Cage

Photo	Port no.	Part no.	Type
 PCI Heat Sink	1X1	902GEA1PXXC40XA0	PressFit
 SAN Heat Sink, Single Light Pipe, Bezel	1X2	902GEA2PXXC46XAD	
 Networking Heat Sink, Bezel	1X3	902GEA3PXXC46XA0	
 PCI Heat Sink, Double Light Pipe, Gasket	1X4	902GEA4PXXC46XA0	
 Networking Heat Sink, Single Light Pipe, Bezel	1X6	902GEA6PXXC46XA0	

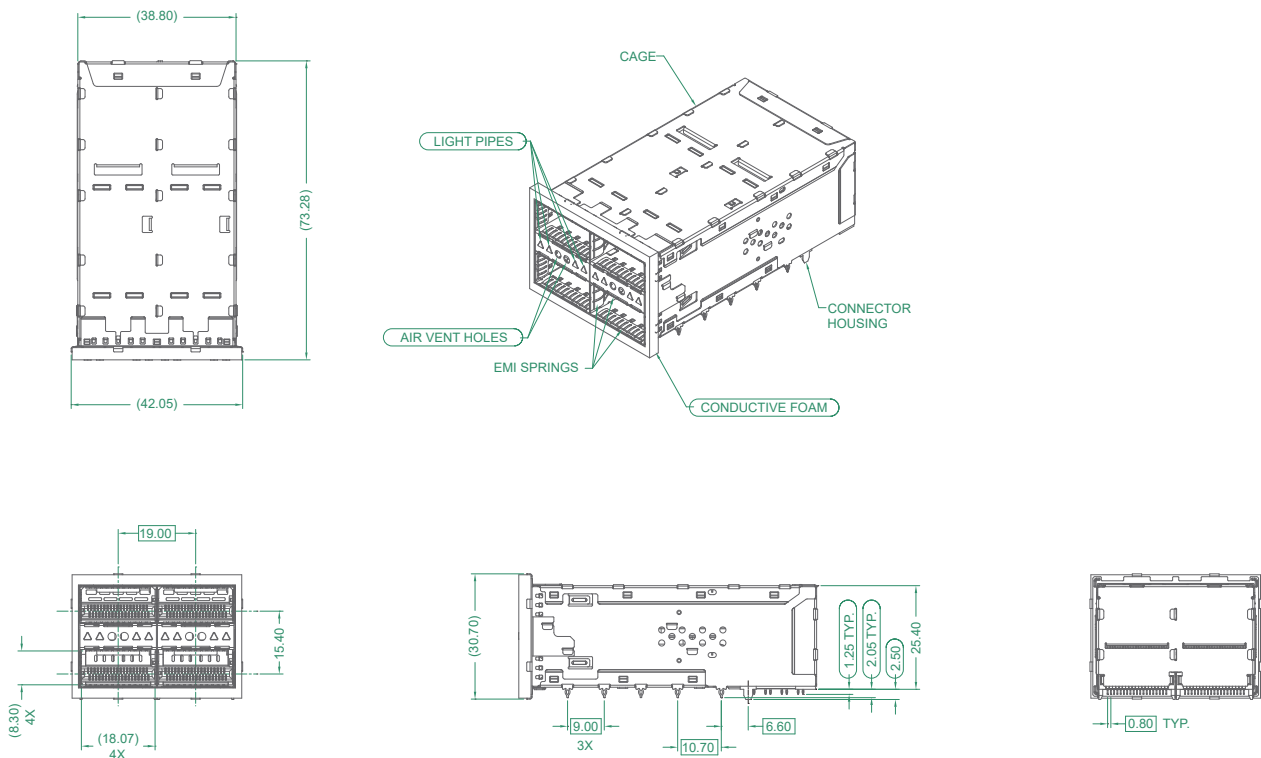
■ QSFP+ 28 Cage

Photo	Port no.	Part no.	Type
 Single Light Pipe, Open Top, Bezel	1X1	902GGA1P5BC641A0	PressFit
 Double Light Pipe, Networking Heat Sink, Bezel	1X2	902GEA2P7XC61XA0	
 Quad Light Pipe, PCI Heat Sink	1X3	902GEA3P7XC61XA0	
 Open Top, Bezel	1X4	902GEA4PCAC61XA0	
 Open Top, PCI Heat Sink, Double Light Pipe, Gasket			

■ QSFP Assembly



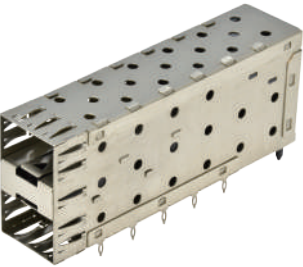
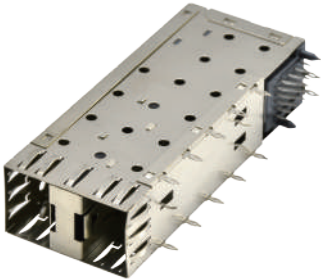
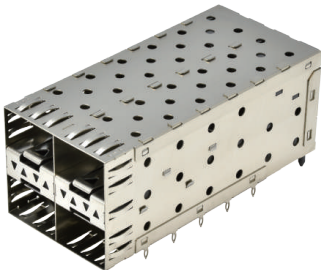


■ Drawing



■ Specification

Description	QSFP Assembly, 2X2, Light Pipe, Conductive Foam	
Part no.	902GHB2XXTA4DXA3	
Material	Cage	Stainless Steel.
	EMI Springs	Stainless Steel.
	Elastomeric Gasket	Conductive Foam.
	Connector Housing	High Temperature Thermoplastic, UI94v-0, Color : Black.
	Contacts	Copper Alloy.
	Light Pipe	Polycarbonate, Clear.
Finsh	Contacts	Gold Plated on Contact Area; Matte Tin Plated on Tail Area.
	This Part Meets The Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2011/65/Eu).	



SFP Assembly

Photo	Port no.	Part no.	Type
 2X1, w/o Light Pipe	2X1	902GHB1BCTAA01A3	PressFit
	2X2	902GHB2BCTAA01A3	
	2X4	902GHB4BCTAA01A3	
	2X6	902GHB6BCTAA01A3	
	2X8	902GHB8BCTAA01A3	

SFP+ Assembly

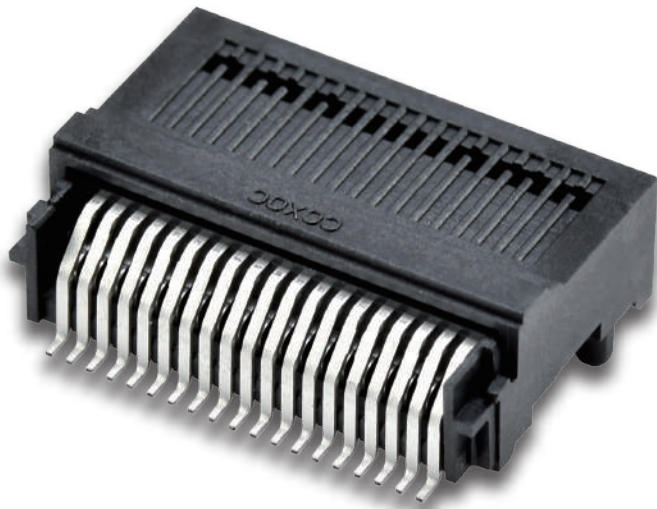
Photo	Port no.	Part no.	Type
 2X4, w/o Light Pipe	2X1	902GHB1BCTA203A3	PressFit
	2X2	902GHB2BCTA201A3	
 2X2, Light Pipe, EMI Gasket	2X4	902GHB4BCTA201A3	
	2X6	902GHB6BCTA201A3	
	2X8	902GHB8BCTA201A3	

■ QSFP+ Assembly

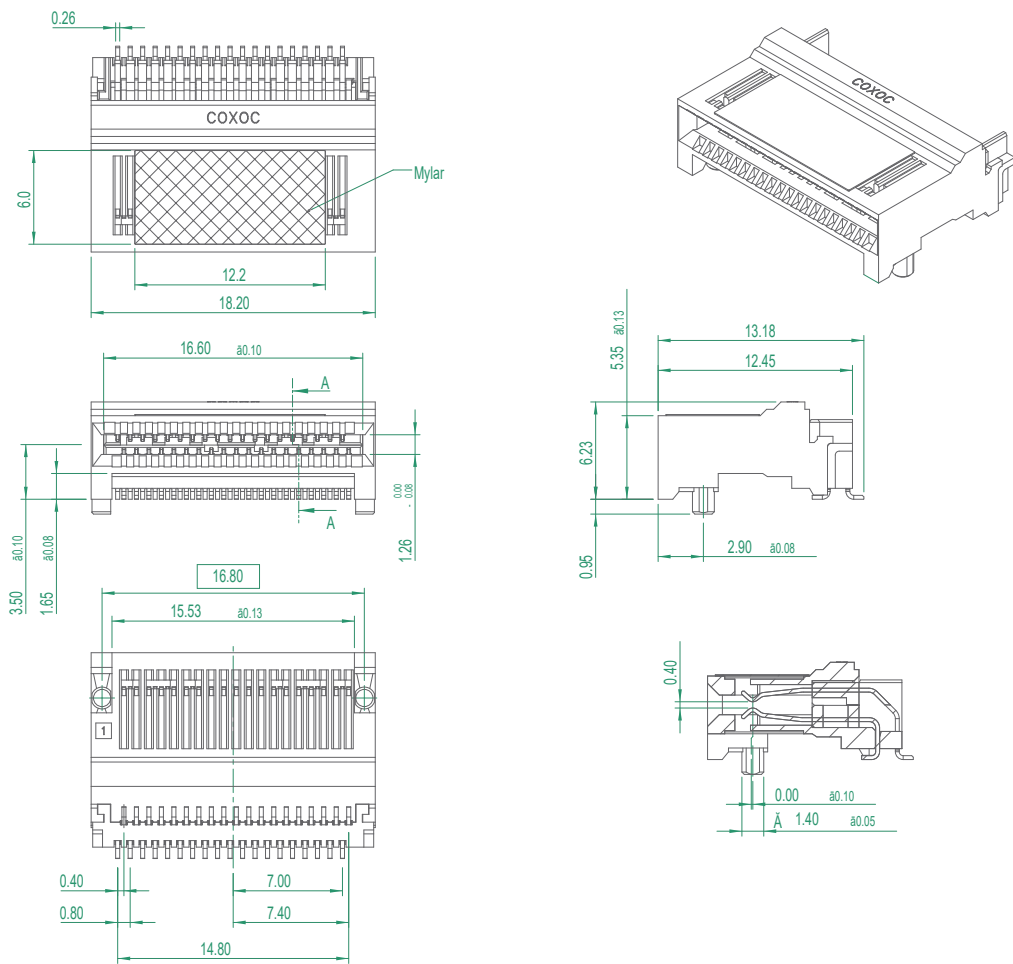
Photo	Port no.	Part no.	Type
	2X1	902GHB1BXTA4TXA3	PressFit
	2X2	902GHB2BXTA4TXA3	
	2X3	902GHB3BXTA4TXA3	



■ QSFP+28G Connector



■ Drawing



■ Specification

Description	QSFP+28G Connector	
Part no.	902DH38BXT0601CX	
Material	Insulator	Thermoplastic, Rated UI94v-0
	Contact	Copper Alloy
	Cover	Thermoplastic, Rated UI94v-0
Contact Plating	Under Plate	50u" ~ 100u" Nickel
	Contact Area	Selective Gold
	Solder Tails Area	100u" ~ 200u" Tin (Lead Free)
Electrical	Current Rating	0.5 A Per Contact
	Rated Voltage	30 VDC Per Contact
	Insulation Resistance	1000 Megaohms Minimum
	Dielectric Withstanding Voltage	300 VDC for 1 Minute
	Storage Temperature	-20°C to +85°C

■ SFP/QSFP Connector

Photo	Description	Part no.
	SFP + 28G Connector Positions: 20	902DH20BXT0701CX
	QSFP Connector Positions: 38	902DH38BXT0400C3
	QSFP + 28G Conn. Positions: 38	902DH38BXT0601CX



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