

註欣股份有限公司 CHANT SINCERE CO., LTD.

CFexpress CFast

www.coxoc.com.tw



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Chant Sincere Co., Ltd. was set up in 1985., With the management concept of "Honest, Innovative, Quaity, 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 Computina, 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.



CHANT SINCERE CO., LTD.

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.

CHANT SINCERE CO., LTD.

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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.



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CFexpress Application

3.2GB/sec. (Type C)

CFexpress Type A Host Connector (1 Channel PCIe) CFexpress Type B Lids (2 Channel PCIe) CFexpress Type B Host Connector (2 Channel PCIe) CFexpress Type C & D Host Connector (4 Channel PCIe)

Application

- SSD
- 8K HD-entertainment
- DSC
- Drone
- Storage

Product Characteristics

- PASS PCIe Gen3 and Gen4 Speed
- High data bit rate up to 16 Gbits/s
- Excellent resistance against cross-talk and RF EMC
- THR and THT capable for automated assemblies

CFexpress



• Professional video features are growing more powerful, with 4K video enjoying widespread use and 8K video already gaining adoption in high-end production environments. Ultra-High Definition TV production environments need more advanced digital formats, such as RAW 4K @ 60 frames per second, which requires reliable and sustainable performance of 700MB/sec and higher. In addition, next generation video applications, such as 8K and even professional 360/VR productions, produce video with incredibly high throughput that exceed legacy CFA cards' data recording of ~600MB/sec, and can benefit from such new spec which supports up to

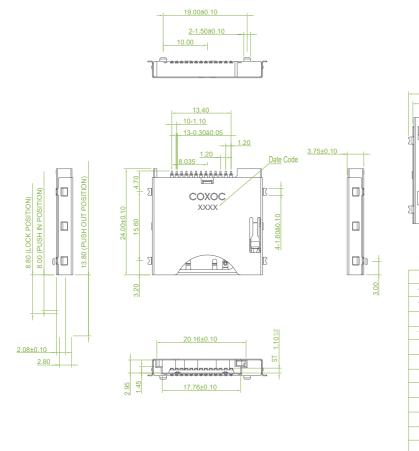
• Mechanical robustness according to automotive requirements

- CFexpress Type A



CFexpress Type A Part No. 752DH13BCTF3J1CC CFexpress Type A with Shell Ground Part No. 752DH13BCTF3J2CC

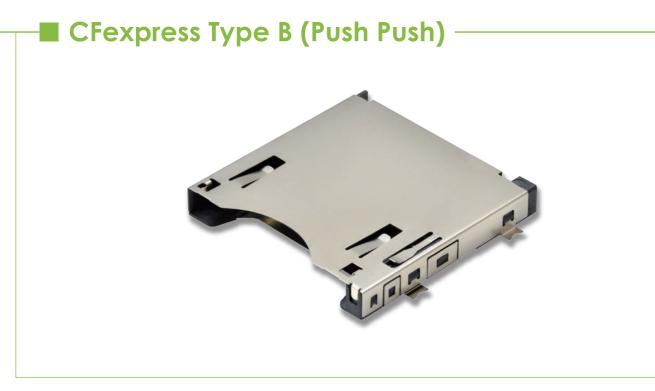
Drawing



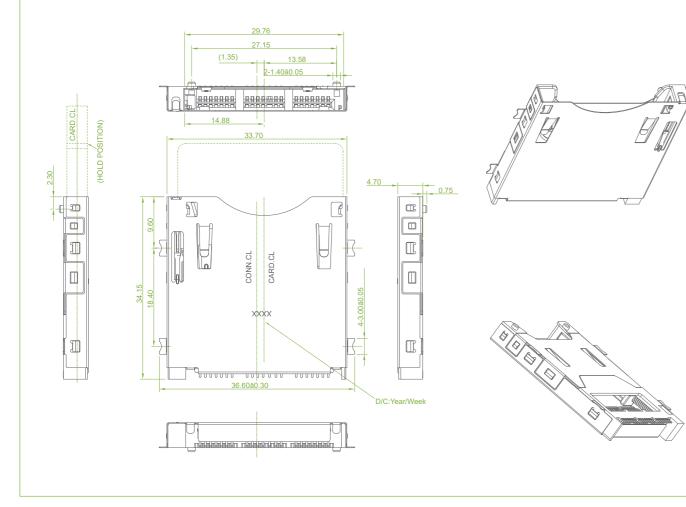
Σ Σ Ω Ω Ω	26.93 24.93±0.1 AAAAAAAAA DDDDDDDDDDDDDDDDDDDDDDDDDDD	
		PIN DESIGN
13	GND	Ground
12	PETp0	PCIe Gen3 Tx singal
11	PETn0	PCIe Gen3 Tx singal
10	GND	Ground
9	PERp0	PCle Gen3 Rx singal
8	PERn0	PCIe Gen3 Rx singal
7	GND	Ground
6	REFCLK+	Reference Clock input
5	REFCLK-	Reference Clock input
4	INS#	Media detection and power control
3	CLKREQ#	Indication of REFCLK to Host
2	+3.3V	3.3V Power Supply
1	PERST#	PCIe Express function reset

Specification

Description	CFexpress Type A	CFexpress Type A with Shell Ground		
Part no.	752DH13BCTF3J1CC	752DH13BCTF3J2CC		
	Insulator	LCP		
	Contacts	YCUT-FX-EH/C17200		
Material	Shell	SUS304 3/4H		
	Spring	SWP-B		
	Cam Rod	SUS304H		
	Under Plate	50u" ~ 120u" Nickel		
Contact Plating	Contact Area	5u" Selective Gold		
	Solder Tails Area	80u" ~ 200u" Tin (Lead Free)		
	Rated Voltage	500 Vrms AC for 1 Min		
	Current Rating	1.0 A Min for Signal pin		
	Current Rating	3.0 A Min for Power pin		
Floren		Initial : 55 M Ohm Max		
Electrical	Contact Resistance	Final : 40 M Ohm Max.		
	Insulation Resistance	1000 M Ohm Min. at 500 VDC/Minute		
	Temperature Range	-25°C to +85°C		
	Mating Cycles	12000 Insertions		



Drawing

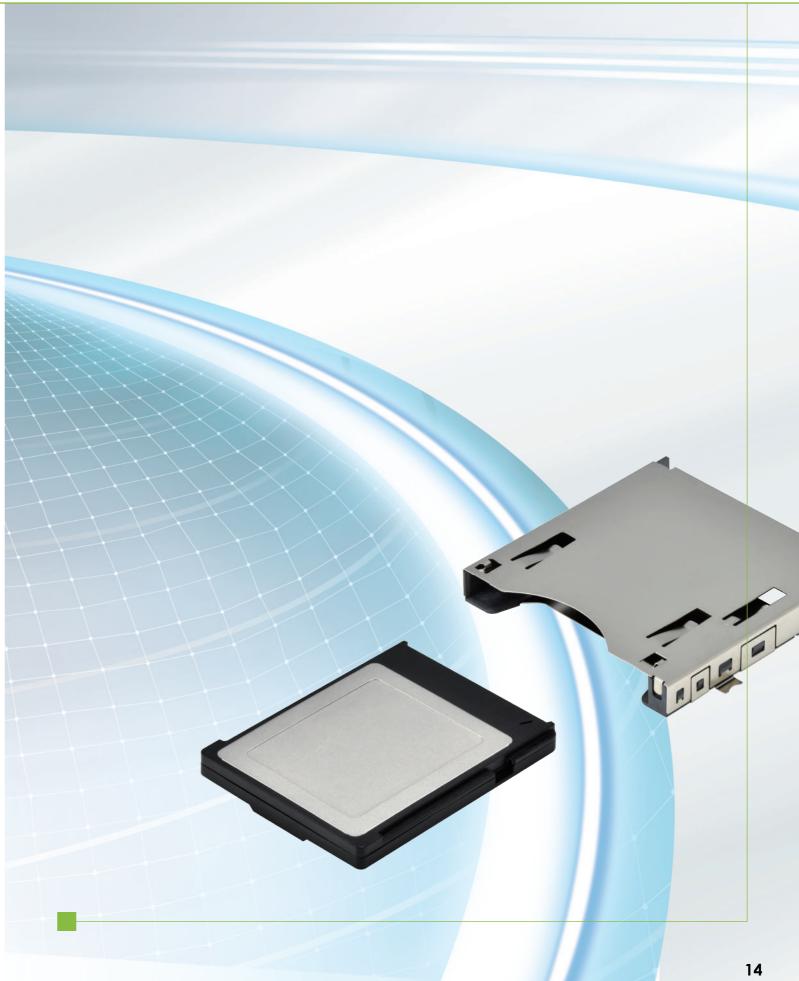


Specification

	D		
	Description		CFexpress Type B (Push Push)
	Part no.		752DH21BCTF281C3
	Insulator	Material	Thermal Plastic UL94V-0
		Material	Copper Alloy
Material /	Contact	Plating	Under Plate:50u" Nickel Contact Area:1u"~30u" Selective Gold Solder Tails Area:80u" Min. Tin/Lead Free (Matte Tin)
Finishs	Madal	Material	Stainless
	Metal	Plating	Non
	Caring	Material	SWP-B
	Spring	Plating	Under Plate: Nickel
	Rated Current(Max.)	1.0 AMP (DC) Max.	Mate Connector Measure By Dry Circuit.
	Rated Voltage(Max.)	100 V	EIA-364-70 Method 2
	Insulation Resistance	Initial:1000 MΩ Min. Final:100 MΩ Max.	Apply 500 VDC Between Adjacent Terminals or Ground. EIA-364-21
Electrical	Contact Resistance	Initial:40 MΩ Max. at initial state. Final:55 MΩ Max.	EIA-364-23B
	Dielectric Strength	No Breakdown	Apply 500 VAC for 1 Minute Between Adjacent Terminals or Ground. EIA-364-20
	Temperature Range	-25°C to +85°C	95% R.H. Max.
	Storage Temperature	-40°C to +100°C	9370 N.TT. Wax.
	Insertion Force (Max.)	50 N	Insert Connectors at The Speed Rate of 25±3 Mm/Min.
Mechanical	Extraction Force (Min./Max.)	4.9 N / 55 N	Retention Connectors at The Speed Rate of 25±3 Mm/Min.
Weenanical	Retention Force (Min.)	9.8 N	Apply Axial Pull Out Force at 25±3 Mm/Min. on The Assembly in The Housing.
	Durability	10,000 Cycle	Operations Using Memory Card at The Rate of 400-600 Cycles within 1 Hours

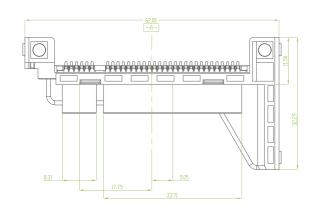
- CFexpress Type B -

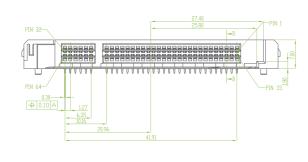
Product List	Description	Part no.
to the second se	CFexpress Type B, Non Push	752DH21BCTF2X0C3
A THE REAL PROPERTY OF	CFexpress Type B, Push Push	752DH21BCTF2X1C3
to the second	CFexpress Type B, Push with Lock	752DH21BCTF2X2C3
	CFexpress Type B, Top Lid	S752SG21P00F41A3
	CFexpress Type B, Bottom Lid	S752SG21P00F42A3

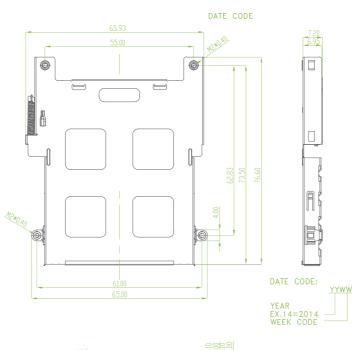




Drawing









Sp	ecification
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Description	CFexpress Type	C & D Connector	CFexpress Type C & D Bracket			
Part no.		BDTF10A3	S752JH64BDTF11A3			
	Insulator	Material	Thermal Plastic UL94V-0			
		Material	Copper Alloy			
Material /	Contact	Plating	Under Plate:50u" Nickel Contact Area:1u"~30u" Selective Gold Solder Tails Area:100u"~200u" Tin/Lead Free (Matte Tin)			
Finishs	Madal	Material	Stainless			
	Metal	Plating	Non			
	Coring	Material	Copper Alloy			
	Spring	Plating	Under Plate : 50u" Nickel			
	Rated Current(Max.)	3.0 AMP (DC) Max.				
	Rated Voltage(Max.)	100 V	Mate Connector Measure by Dry Circuit.			
	Insulation Resistance	1000 MΩ Min.	Apply 500 VDC Between Adjacent Terminals or Ground.			
Electrical	Contact Resistance	40mΩ Max. at initial state. 60mΩ Max. after endurance test.	Mate Dummy Card Measure by Dry Circuit, 20mV Max, 10m A.			
	Dielectric Strength	No Breakdown	Apply 500 VAC for 1 Minute Between Adjacent Terminals or Ground			
	Temperature Range	-55°C to +85°C				
	Storage Temperature	-25°C to +65°C	95% R.H. Max.			
	Insertion Force (Max.)	50 N	Insert Connectors at The Speed Rate of 25±3 Mm/Min.			
Mechanical	Extraction Force (Min./Max.)	4.9 N / 55 N	Retention Connectors at The Speed Rate of 25±3 Mm/Min.			
Weenanica	Retention Force (Min.)	9.8 N	Apply Axial Pull Out Force at 25±3 Mm/Min. on the Assembly in The Housing.			
	Durability	10,000 Cycle	Operations Using Memory Card at The Rate of 400-600 Cycles within 1 Hours			

CFast Application

limited to 167 MByte/s using UDMA 7. adapter for the Arri Alexa/XT camera was also released.

Application

- Digital Camera
- Readers for various other Flash media
- Microdrive
- RFID
- Barcode scanner
- GPS
- Wi-Fi
- Ethernet
- Bluetooth

Product Characteristics

 SATA Revision 3.1 compilance with 6.0 Gbps interface speed Backward compatible with SATA 1.5 and 3.0 Gbps interfaces 7+17 pin Female connector Supply 3.3 Voltage Sustained Read: Up to 285 MB/sec ; Write: 260 MB/sec

CFast



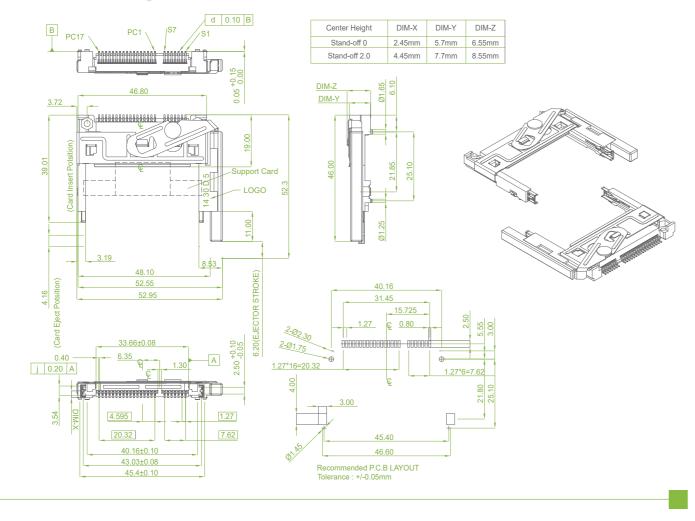
• A variant of CompactFlash known as CFast is based on the Serial ATA bus, rather than the Parallel ATA/IDE bus for which all previous versions of CompactFlash are designed. CFast is also known as CompactFast. CFast 1.0/1.1 supports a higher maximum transfer rate than current CompactFlash cards, using SATA 2.0 (300 MByte/s) interface, while PATA is

The CFast 2.0 specification was released in the second quarter of 2012, updating the electrical interface to SATA 3.0 (600 MByte/s). As of 2014, the only product employing CFast 2.0 cards was the Arri Amira digital production camera, allowing frame rates of up to 200 fps; a CFast 2.0

CFast with Ejector



Drawing



Specification

	Description	CFast with Ejector
	Part no.	752DH24MCTS32XXX
	Insulator	Thermal Plastic ,UL94V-0
Material	Contact	Copper Alloy
	Shell	Steel
	Under Plate	50u" ~ 100u" Nickel
Contact Plating	Contact Area	15u" Selective Gold
	Solder tails area	100u" ~ 200u" Tin (Lead Free)
	Current Rating	1.5 Amps Max.
	Contact Resistance	30 Mohms Max.
Electrical	Insulation Resistance	1000 Mohms Min. @500 VDC
	Dielectric Withstanding Voltage	500 VAC / Minute
	Temperature Range	-55°C DC to +85°C DC

- CFast Series -

Product List	Description	Part no.
ananan	50Pin, Female, Standard Type, Black	751C02H50FS003
anter anter anter anter anter and	50Pin, Female, Middle Ear, Black	751C02E68FS303
	50Pin, Male, Black	752CF50MSA0003
	50Pin, Male, Black	S752CO2F50MCA03
	50Pin, SMT Type, 0mm Stand off Distance	752DF50BC10011
	50Pin, SMT Type, 2.2mm Stand off Distance	752DF50BC20011

Product List	Description	Part no.
E A A	50Pin, SMT Type, 1.64mm Stand off Distance	752DF50NC00001
en en	50Pin, SMT Type, 1.64mm Stand off Distance	752DF50NC01001
	50Pin, SMT Type, Male, 2.2mm Stand off Distance	752DF50MCT1214A1
a sense and	50Pin, SMT Type, Male, w/ Pick Pad, 2.2mm Stand off Distance	752DF50MCT1215A1
S. A. MILLION MILLION	50Pin, Slim Type, 2.2mm Stand off Distance	752D02F50CAD301
To And the second s	50Pin, Slim Type, w/ Pick Pad, 0mm Stand off Distance	752D02F50CRD00P

- CFast Series -

Product List	Description	Part no.
C. A. MINIMUM C.	50Pin, Slim Type, w/ Pick Pad, 2.2mm Stand off Distance	752D02F50CAD30P
The second se	50Pin, Slim Type, 40.16mm Pos Distance	752D07F50SC1001
2	50Pin, Slim Type, 38.74mm Pos Distance	752D07F50SA1001
	50Pin, Slim Type, 40.16mm Pos Distance	752D08F50S21001
	24Pin, Female, Tray,Black	S752DH24FCTS21A3
	24Pin, Bottom Cover	S3752DE24P80S23A

Product List	Description	Part no.
	24Pin, Top Cover	M3752DE24P80S23A
State State	24Pin, Male, w/o Ejector, 0mm Stand off Height	752DH24MCTS310A3
Bren and a	24Pin, Male, w/o Ejector, 2.0mm Stand off Height	752DH24MCTS311A3
	24Pin, Male, w/ Ejector, 0mm Stand off Height	752DH24MCTS320A3
	24Pin, Male, w/ Ejector, 2.0mm Stand off Height	752DH24MCTS321A3



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