

Connector Selection Guide

Technology to Inspire Innovation



V2.1

Board-to-Board Connectors


Socket side: **AA03 - S###VA1 - R6000**
Pin side: **AA03 - P###VA2 - R6000**

Orderable in Reels of 6000


Socket side: **WH1S###WA1-E6000**
Pin side: **WH1P###WA1-E6000**

Orderable in Reels of 6000

Socket side: **WR - ###S - VF - N1**

B: Positioning Boss  H05: +0.5mm
H30: +3.0mm

Vert Pin side: **WR - ###P - VF - N1**

B: Positioning Boss  50: +1.0mm
60: +2.0mm

R/A Pin side: **WR - ###P - HF - HD - A1E**


Socket side: **AA07A - S###VA1 - R6000**
Pin side: **AA07 - P###VA1 - R6000**

Socket side: **AA07B - S###VA1 - R6000**
Pin side: **AA07B - P###VA1 - R6000**

Socket side: **AA01A - S###VA1 - R3000**
Pin side: **AA01A - P###VA1 - R3000**

Orderable in Reels of 3000


Female side: **WB3F200VD1**

 T: Mounting Tape


Male side: **WB3M200VD1**

Height code:  T: Mounting Tape
1: Standard
2: +1.0mm

Receptacle: **KX14 - ##K 2 DE**

 Stack Height:
2, 5, 8mm

Straight Plug: **KX15 - ##K 3 DE**


 Stack Height:
2, 4mm

R/A Plug: **KX15 - ##K L DLE**

 Right angle


Receptacle: **KX24 - ###R - LT - H1**

Plug: **KX25 - ###P - LT - H1**

LT: Right-angle  H: Hook pin
6ST: Straight

Receptacle: **TX24 - ###R - LT - H1E**

Plug: **TX25 - ###P - LT - H1E**

Stacking Height: 
Receptacle:
6, 10, 12mm
Plug:
6, 8, 12mm
*Right-angle leave blank

H: Hook pin
N: No hook pin

LT: Right angle
ST: Straight

Series	AA03	AA07	WH1	AA01A	WB3	WR	KX14/15	KX24/25	TX24/25
Photo									
Pitch	0.4mm	0.4mm	0.4mm	0.5mm	0.5mm	0.5mm	0.8mm	0.8mm	1.27mm
Stacking Heights	1.0mm	0.7mm	1.0mm	1.5mm	4.0, 5.0mm	4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 8.0, 9.0mm	5.0, 6.0, 8.0, 9.0, 11.0, 12.0mm	N/A	12.0-24.0mm (±2.0mm)
Pin Count (Parallel)	16,20,22,24,30,36,40,42,50,64,70,80	26,30,40,50,60,70	24,30,40,50	10,30,40,60	200	20,30,40,50,60,70,80,100,120,160	20,30,40,50,60,70,80	80,100,120,140,180	30,40,44,50,60,80,100,120
Pin Count (Right Angle)	N/A	N/A	N/A	N/A	N/A	30,40,50,60,70,80,120	20,30,40,50,60,70,80	80,100,120,140,180	30,40,44,50,60,80,100,120
Board Mount	SMT	SMT	SMT	SMT	SMT	SMT	SMT	Thru-hole	Thru-hole
Current Rating	0.4A	0.2A	0.4A	0.2A	0.5A	0.3A	0.5A	0.5A	1.0A
Voltage Rating	50VAC 50VDC	50VAC 50VDC	50VAC 50VDC	50VAC 50VDC	200VAC	200VAC 300VDC	200VAC 300VDC	200VAC	250VAC
Durability	50 cycles	50 cycles	50 cycles	30 cycles	25 cycles	500 cycles	500 cycles	500 cycles	500 cycles
Features	High retention force.	High retention force for low pin counts and low insertion force for high pin counts.	Two point contact to resist twisting stress.	Dual mating contact.	Conforms to PCI Express signal standard.	9 different vertical stack heights.	Mating guide for orientating contacts. Key to prevent mismatching.	Robust mating guide. Click response when mated.	Ribbon type contacts ensures reliable electrical continuity.

Input/Output Connectors (Docking)

Receptacle:	DD1R030HA1 DD1R030JA7	Standard mount Reverse mount
Docking Plug:	DD1B030VA1 DD1B030HA1	Vertical Right angle
Cable Plug:	DD1P030MA1	

Receptacle:	DD2R040HP2
Docking Plug:	DD2B040HA2
Cable Plug:	DD2P040MA1

PC side:	PM2R013 N Q 1	
N: Horizontal	_____	Modification Code 1: Standard, 2.25mm 2: Reverse, 4.6mm 3: Reverse, 6.5mm 4: Reverse, 7.9mm
V: Vertical	_____	
ODD Side:	PM2B013H P 1	
Au Plating Thickness	_____	Hold Down Type 1: Screw fix type 2: Solder tab
P: 0.1um	_____	
Q: 0.3um	_____	
S: 0.76um	_____	



PC side:	PM3R022UQ1
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PC Side:	PM5R016 V Q1	
V: Vertical T/H	_____	V: Vertical T/H U: Vertical SMT
U: Vertical SMT	_____	

Female side:	WM1F068N S A	
N: R/A Thru-hole	_____	Height code: A: Standard B: Reversed D: +0.4mm E: +5.0mm F: +1.3mm
U: Vertical Thru-hole	_____	
Male side:	WM1M068USA	

Female side:	WM2F054WPA
Male side:	WM2M054JPA

Receptacle:	WD2F###WB1	
Plug (Dock):	WD2M###WB2	_____ Height modification Code

Series	DD1	DD2	PM2	PM3	PM5	WM1	WM2	WD2
Photo								
Pitch	0.5mm	0.5mm	Signal: 1.27mm Power: 1.0mm	1.27mm	1.27mm	1.0mm	1.0mm	0.5mm
I/O	Cable I/O 75° Vert Dock R/A Dock	Cable I/O R/A Dock	R/A and Vert Dock	Vert Dock	Vert Dock	R/A and Vert Dock	R/A and Vert Dock	Vert Dock
Pin Count	30	40	13	22	16	68	54	100, 144 Signal 4 Power
Signal Standard	USB 2.0	USB 2.0	SATA	SATA	SATA	USB 2.0	USB 2.0 SATA	PCIe, USB, LVDS, TMDS, DisplayPort
Current Rating	Signal: 0.5A Power: 1.0A	Signal: 0.5A Power: 1.0A	1.5A	1.5A	1.5A	0.5A	0.5A	Signal: 0.5A Power: 10A per pair
Voltage Rating	30VAC	30VAC	30VAC	30VAC	30VAC	125VAC	125VAC	Signal: 200VAC Power: 20V
Durability	10,000 cycles	10,000 cycles	500 cycles	500 cycles	500 cycles	5,000 cycles	10,000 cycles	10,000 cycles
Operating Temp	-25 ~ +75 °C	-25 ~ +75 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +85 °C
Locking	Latch	Latch	N/A	N/A	N/A	N/A	N/A	N/A
Features	Hugely successful design. I/O for market leading product.	Robust and compact design.	Slim line SATA standard for optical disk drives.	SATA standard for hard disk drives.	Micro SATA standard compatible for 1.8" HDD and SSD.	Low profile docking. Insertion guide.	±1.7mm blind mating. Ground to ground first contact.	Compatible with various high speed differential transmission.

Input/Output Connectors

Receptacle: **DC1R019JBA**

Cable Har- **DC1P019ST30200**

Restricted to HDMI Adapters
Contact JAE for additional options

Receptacle: **DE1R015ND1**

Cable Harness: **DE1P15T0014719**

Contact JAE for other cable lengths

Receptacle: **DC2R019JA4**

Modification
Code

Cable Har- **DC1DC2ST2150B**

Restricted to HDMI Adapters
Contact JAE for additional options

Receptacle: **DP1R 0 20 JQ 1**

Shell Plating _____ Modification Code
0: Tin
D: Nickel Board Connection Type
J: SMT

Cable Plug: **DP1P020ST2 200 LB**

Cable Length _____ LB: With latch
B: Without latch

For additional options, visit our website

Type B miniUSB: **DX2R005HN2E700**

Type AB miniUSB: **DX3R005HN2E700**

Receptacle: **DX4R005 J91R1500**

Board Connection Type
J: T/H
H: SMT

Receptacle: **DL1R068JB 1**

1: Standard
2: Reverse

Plug Har- **DL1P068 TX4 L###**

Cable Specification _____ Cable Length
Twinax AWG #34

Contact JAE for additional options

Receptacle: **DG1R025HS5**

Cable: **DG1P025 S##L###R**

025: 4x Infiniband
073: 10x, 12x Infiniband

Cable length
(mm)
Wire size (AWG)

For additional options, visit our website

Series	DC1	DC2	DL1	DP1	DX 2,3	DX4	DE1	DG1
Photo								
Pitch	1.0mm	0.4mm	0.7mm	1.0mm	0.8mm	0.65mm	1.27mm	0.5mm
I/O	Cable I/O	Cable I/O	Cable I/O	Cable I/O	DX2: miniB DX3: miniAB	Cable I/O	Cable I/O	Cable I/O
Pin Count	19	19	68	20	5	5	15	25,73
Signal Standard	HDMI	HDMI	PCI Express x8, USB 2.0	DisplayPort	USB 2.0	USB 2.0	PCI Express x1	Infiniband x4, x12
Current Rating	0.5A	0.5A	0.5A	0.5A	1.0A	Signal: 0.5A Power: 1.8A	0.5A	0.5A
Voltage Rating	40VAC	40VAC	30VAC	40VAC	30VAC	30VAC	40VAC	30VAC
Durability	10,000 cycles	5,000 cycles	10,000 cycles	10,000 cycles	5,000 cycles	10,000 cycles	10,000 cycles	250 cycles
Operating Temp	-20 ~ +85 °C	-20 ~ +85 °C	-20 ~ +85 °C	-20 ~ +85 °C	-20 ~ +60 °C	-30 ~ +80 °C	-40 ~ +80 °C	-25 ~ +70 °C
Locking	N/A	N/A	Latch	Latch	N/A	N/A	Latch	Lanyard
Features	HDMI standard compatible.	Mini HDMI standard compatible.	Developed for ATI XGP™ external graphics card.	DisplayPort standard compatible.	Mini USB standard compatible.	Micro USB standard compatible.	High speed I/O for PCI express transmission.	Integrated with GORE cable for superior performance.



Board-to-Flex Connectors

Loose pcs: **FB3S###C11**

Reel: **FB3S###C11R3000**

Loose pcs: **FA5S0##HP1**

Reel: **FA5S0##HP1R3000**

Loose pcs: **FF02S##SV1**

Reel: **FF02S##SV1-R3000**

Loose pcs: **FA5B0##HP1**

Reel: **FA5B0##HP1 R3000**

1: t0.3mm FPC/FFC
3: t0.14mm FPC/FFC

Loose pcs: **FB6S###JA1**

Reel: **FB6S###JA1R3000**

Loose pcs: **FF03##SA1**




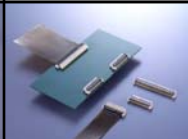
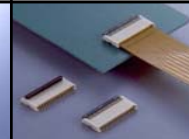
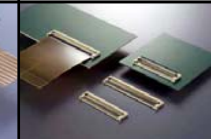


Reel: **FF03##SA1 - R2000**

Loose pcs: **FG2S0##JA1**

Reel: **FG2S0##JA1R3000**

Loose pcs: **FB8S###JA1**

Reel: **FB8S###JA1R2000**

Series	FG2	FF02S	FB3	FB6	FB8	FF03	FA5B	FA5S
Photo								
Pitch	0.2mm	0.3mm	0.3mm	0.3mm	0.3mm	0.5mm	0.5mm	0.5mm
Mounted Height	1.2mm	0.9mm	1.9mm	1.2mm	1.2mm	2mm	1.0mm	1.45mm
FPC/FFC	0.2±.03mm	0.12±.03mm	0.2±.03mm	0.15±.03mm	0.2±.03mm	0.3±.05mm	0.3±.05mm 0.14 ±.03mm	0.3±.05mm
FPC Orientation	Lower	Lower	Lower	Lower	Upper	Lower	Lower	Lower
Pin Count	33,39,45,51,57, 63	15,17,25,27,29, 31,33,35,40,45, 50,55,60,65	17,21,25,27,33, 35,39,45,49,51, 53,57,61,71	15,17,21,25,27, 29,33,39,45,51, 53,57,59	17,23,25,29,31, 33,35,39,41,45, 51	60,64,68,80,96	6,8,10,16,20,30, 36,40,45,50	6,8,10,15,16, 18,20,22,24, 26,30,36,40, 45,50
Mating	LIF	Cam Lock	LIF	LIF	ZIF	ZIF	ZIF	ZIF
Current Rating	0.35A	0.35A	0.35A	0.35A	0.35A	0.5A	0.8A	0.8A
Voltage Rating	50V	50V	50V	50V	50V	50V	50V	50V
Features	Smallest pitch. Rotating actuator.	Lowest profile and smallest depth	Rotating actuator	Rotating actuator	Actuator on rear end of FB5 for superior retention	Highest pin count	Suspended mount for extremely low profile	Easy slider operation

Board-to-Cable Connectors

Receptacle: **FI - J##S - VF15N**

Cable Plug: **FI - J##C5**

Plug Shell: **FI - J##C2 - SH - D - 10000**
Only orderable in reels

Receptacle: **FI - JH##S - HF10**

Cable Plug: **FI - JH##C - B**

Plug Shell: **FI - JH##C - CSH1 - 10000**
Only orderable in reels

Receptacle: **FI - R_ ## S - #F**

E: EMI shell H: Horizontal
V: Vertical

Cable Plug: **FI - R_ ## H**

E: EMI shell L: Locking Latches
H: Discrete wire crimp
C: Fine-wire coaxial

Cover Shell: **FI - RE ## CL- SH2 - 3000**

Only for coax plug

Crimp Contacts: **FI-RC3-1A-1E-15000 (upper)**
FI-RC3-1B-1E-15000 (lower)

Hand Crimp Tool: **CT150-4C-FIR**
Semi-auto: **3502-FI-2B**

Receptacle: **FI - X_ 30S** L - HF

B: Mid mount R: Reverse
S: Stronger shell

Cable Plug: **FI - X30H**

H: Discrete wire crimp L: Locking latches
HL: Crimp, Lock
C, C2: Fine-wire coaxial
MA1, FR: FPC/FFC

Crimp Contacts: **FI-XC3A-1-15000**
Hand Crimp **CT150-4C-FIX**
Tool: **3502-FI-2B**

Single Row

Receptacle: **FI - S##P - HFE**

Cable Plug: **FI - S_ ##S**

E: EMI Shell S: Discrete wire crimp
ME: FPC/FFC
MRE: Rev. FPC/FFC

Dual Row

Receptacle: **FI - W##P - HFE** Right-angle
FI - TWE##P_ - VF Vertical
B: Positioning Boss

Cable Plug: **FI - W##S**

Crimp Contacts: **FI-C3-A1-15000**
Hand Crimp Tool: **CT150-4C-FI**
Semi-Auto: **3502-FI-2B**

SMT Receptacle: **IL - Z - ##PL# - SMTYE**

1: 0.6mm post

Cable Plug: **IL - Z - ##S - S125C3**

Crimp Contacts: **IL - Z-C3-A-15000**
Hand Crimp Tool: **CT150-4C-ILZ**
Semi-Auto: **3502-ILZ-2**

Receptacle: **FI - E##S**

Cable Plug: **FI - E##C**

H: Discrete wire crimp
HL: Crimp, Lock
C, C2: Fine-wire coaxial

Crimp Contacts: **FI-XC3A-1-15000**
Hand Crimp **CT150-4C-FIX**

For cable side accessories, visit our website

Vertical Recep: **IL - G - ##P - S3T2 - SA**
R/A Recep: **IL - G - ##P - S3L2 - SA**
Cable Plug: **IL - G - ##S - S3C2 - SA**

Crimp Contacts: **IL-G-C2-SC-10000**
Hand Crimp Tool: **CT150-1_ -ILG**

Semi-Auto: **3502-ILG-2**
blank: AWG#28-26
B: AWG#26-24
C: AWG#24-22
D: AWG#20

Series	FI-J	FI-JH	FI-R	FI-X	FI-E	FI (single row)	FI (dual row)	IL-Z	IL-G
Photo									
Pitch	0.4mm	0.4mm	0.5mm	1.0mm	1.0mm	1.25mm	1.25mm	1.25mm	2.5mm
Discrete Wire AWG	N/A	N/A	#30,32,36	#30,32,36	#30,32,36	#28,30,32	#28,30,32	#28,30,32	#22,24,26,28
Coax AWG	#42,44	#42-46	#40	#32,40	#40	N/A	N/A	N/A	N/A
FPC/FFC	N/A	N/A	FFC (JF04)	0.14±0.03mm	N/A	0.14±0.03mm	N/A	N/A	N/A
Pin Count	20,25,30,35,40	30,35,40	21,31,41,51	30	30	2-6,8,10,15,20,25,30	5,7,9,11,13,15,17,19,21,31,41	2-15	2-15
R/A Height	1.58mm	1.0mm	3.8mm	1.0-2.35mm	3.2mm	1.8mm	3.7mm	3.45mm	6.0mm
Locking	N/A	N/A	Latches	Latches	Latches	N/A	N/A	N/A	N/A
Durability	30 cycles	30 cycles	50 cycles	50 cycles	50 cycles	50 cycles	50 cycles	50 cycles	100 cycles
Current Rating	0.3A	0.3A	0.8A	1.0A	1.0A	1.0A	1.0A	1.0A	3.0A
Voltage Rating	50V	50V	200V	200V	200V	200V	200V	200V	500V
Features	Vertical mating. Small footprint.	Horizontal mating. Low profile.	VESA standard for LCD interface of HD TV. Vertical avail.	VESA standard for 1.0mm pitch LVDS.	Large mating guide for easy operation.	Single row for low profile.	Dual row for smaller footprint.	Multiple terminal lengths available.	Thru-hole. Extremely low cost. Vertical mount available.

Card Connectors (microSD, SIM)

MicroSD:
Hinged type

ST1W008S4 A R1500

└─ Modification code

Orderable in reels

SIM / microSD:
Combo

ST7S014V4BR80

Orderable in reels

MicroSD:
Hinged type

ST1W008S4 G

└─ G: Without detect switch
K: With detect switch

Orderable in reels

microSD:
Push-push type

ST9S008V4AR150

Orderable in reels

SIM / microSD:
Combo

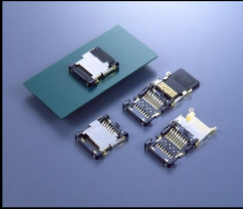
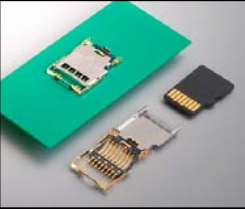




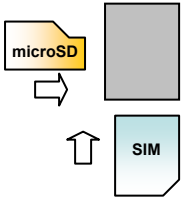
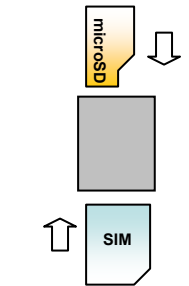
ST5S014V4AR80

Orderable in reels

microSD:
Push-push type

ST10S008V4AR180

Orderable in reels

Series	ST1	ST1 G/K	ST5	ST7	ST9	ST10
Photo						
Card	microSD	microSD	Combo (microSD & SIM)	Combo (microSD & SIM)	microSD	microSD
Mounted Height	1.9mm	1.4mm	2.8mm	3.2mm	1.45mm	1.25mm
Pin Count	8	8, 8+2	14+2	14+4	8+2	8+2
Voltage Rating	10V	10V	10V	10V	10V	10V
Current Rating	0.5A	0.5A	0.5A	0.5A	0.5A	0.5A
Durability	10,000 cycles	10,000 cycles	microSD: 10,000 cycles SIM: 5,000 cycles	microSD: 10,000 cycles SIM: 5,000 cycles	10,000 cycles	10,000 cycles
Style	Hinged	Hinged	Top: SIM Bottom: microSD	Top: SIM Bottom: microSD	Push-push	Push-push
Features	Cover has 4 ground connection points for EMI shielding. Lock structure prevents cover from opening accidentally.	Available with card detection switch. Lowest height for hinged type.	Card detection switch for microSD card. 4 ground points for EMI prevention. 	Card detection switch for both SIM and microSD cards. 	Card detection switch. Countermeasure to prevent card from flying out.	Lowest height in the market.

Card Connectors (SIM, CF, MicroDIMM, PCIe, MXM)

Compact Flash:
Connector: **JC26A-BBE**

Frame: **JC26C2 - D S R _ E**

D: Push-push ejector
F: Fixed ejector
S: Standard
R: Reversed
16: +1.6mm
R: Right, flip
L: Left, flip
M: Right, fixed
H: Left, fixed

SIM: **SF7W 006 S 1 A**

006: 6 position
008: 6 signal + 2 switch

A: Positioning boss
B: No boss
E: Low profile

1: Standard
4: Low profile

DDR2 MicroDIMM:
Female side: **WA6F214VA1T**
Male side: **WA6M214VA1T**

SIM: **SF8V006S4AR1200**

Slide type
connector

A: Standard
B: Reverse

Orderable in reels

Tray for: **SF8-STS1-A** Standard
SF8-STR1-B Reverse

Need both Connector and Tray to use SF8 series

SIM: **SF9W006S4AR1200**

Slide type
connector

A: Standard
B: Reverse

Orderable in reels

Tray for: **SF9-STS1-A** Standard
SF9-STR1-B Reverse

Need both Connector and Tray to use SF9 series

Express Mini Card:

Connector : **MM60 - 52 - B 1 - E 1**

No. of contacts
Socket type
Key type
Contact finish
Height modification code

Latch : **MM60 - EZ - H059 - B 5**

Latch type
Connector height
With boss
5: Sn plating

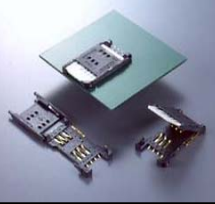

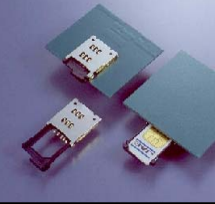




Nut : **NT1R3000** 3.9mm height
NT4R1600 5.9mm height

MXM 3.0 Graphics:

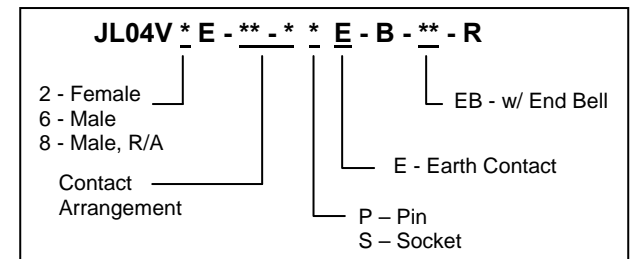
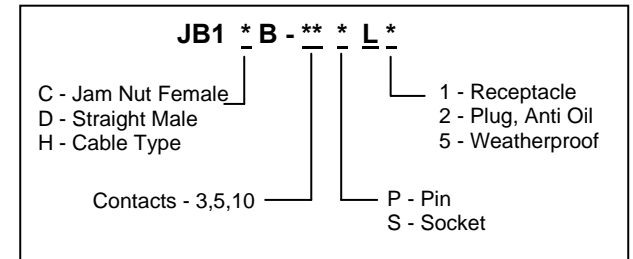
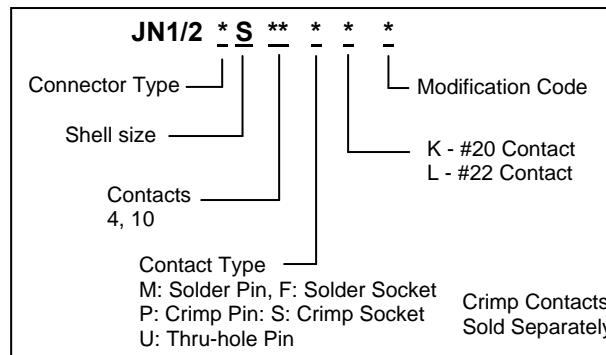
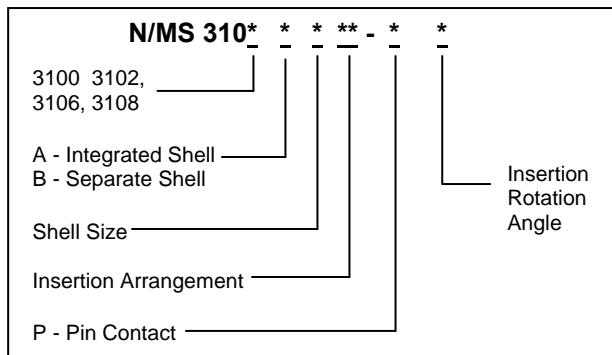
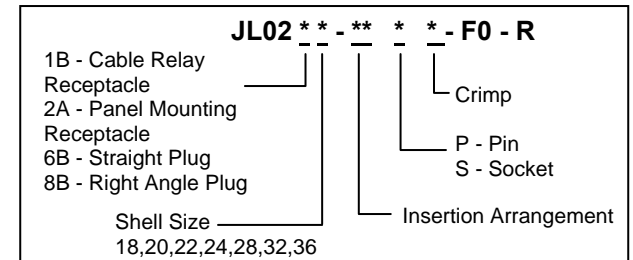
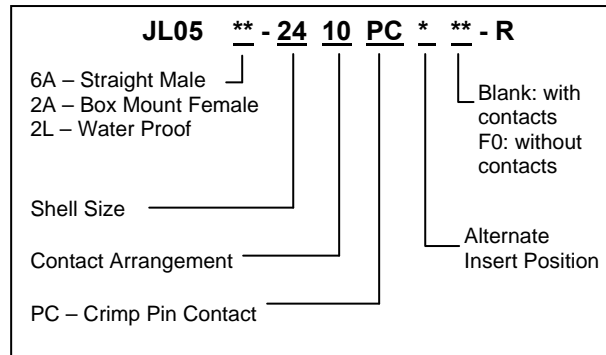
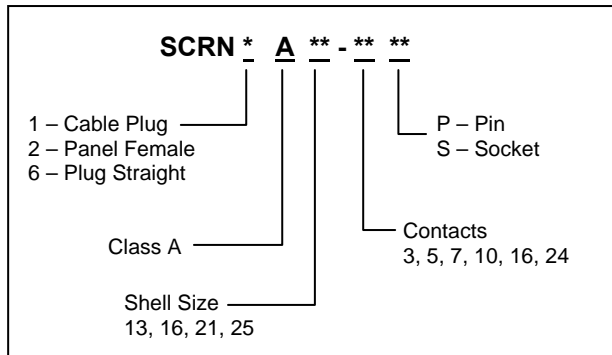
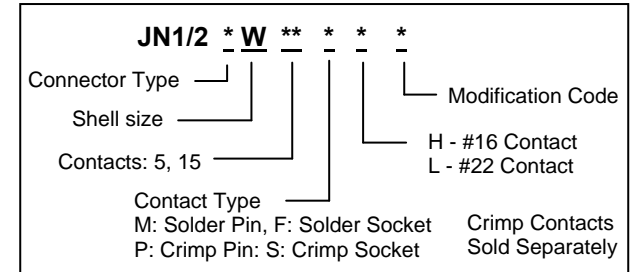
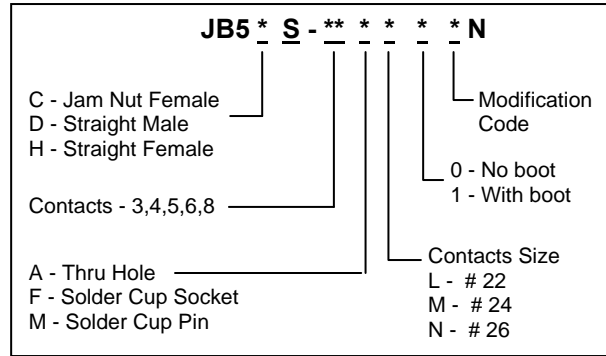
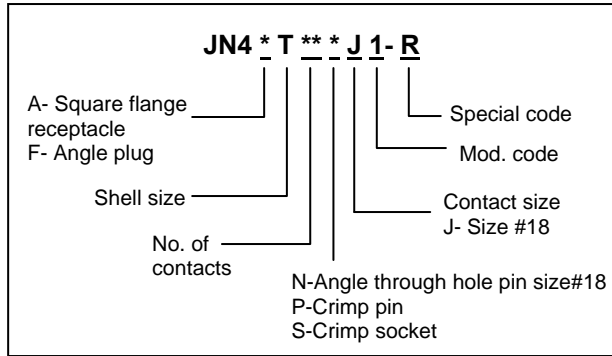
Connector: **MM70-314-310B 1 - 1**











Height code:
1: 6.7mm
2: 4.3mm

Gold Plating Thickness
1: 0.1µm
2: 0.3µm

Series	SF7	SF8	SF9	JC26C2	WA6	MM60	MM70
Photo							
Card	SIM/SAM	SIM	SIM	CF	MicroDIMM	PCI Express Mini Card	MXM3.0 Graphics Board
Mounted Height	1.9, 2.3, 2.5mm	1.55mm	1.8mm	5.8, 7.4mm	3.0mm	3.9, 5.9mm	4.3, 6.7mm
Pin Count	6, 6+2	6	6	50	214	52	314
Current Rating	10µA to 1A	10µA to 1A	10µA to 1A	0.5A	0.3A	0.5A	0.5A
Durability	5,000 cycles	5,000 cycles	5,000 cycles	10,000 cycles	25 cycles	50 cycles	30 cycles
Style	Hinged	Tray type	Tray type	Ejector	Board to board	Module socket	Module socket
Features	Locked structure. Positioning boss or metal cover available.	Lowest profile for tray type connector. Normal and reverse mount available.	Normal and reverse mount available. 5 hold downs for EMI and ESD prevention.	Reverse mount avail. Retractable ejector avail.	DDR2 MicroDIMM JEDEC Standard MO-260B SO-004A	Retention latch part available to fix module to connector.	Redesigned positioning stopper prevents contact failure.

Circular Connectors



Series	JB5	JB1	JN1 / JN2	JN1W / JN2W	JN4	SRCN	JL02	JL04V	JL05	N/MS
Photo										
Shell Size	Φ11.0mm	Φ18.0mm	Φ19.0mm	Φ26.2mm	Φ5-55mm	Φ21.2-33.2mm	Φ34-62.7mm	Φ22-56.3mm	Φ36-51.7mm	Φ20-77mm
Pin Count	3, 4, 5, 6, 8	3, 5, 10	4, 10	5, 15	2, 4	3, 5, 7, 10, 16, 24	10, 17, 19, 24, 37, 48, 54	3, 4, 6, 7, 8, 9, 18, 22	4,5,7,8,9,10, 17,19,24,30, 36,37,52,73	1~11,14,16,17, 19,22,24,26,35, 37,48,54
Shell Material	Metal	Metal	JN1: Plastic JN2: Metal	JN1W: Plastic JN2W: Metal	Plastic	Metal	Metal	Metal	Metal	Metal
Mated Condition	IP68	IP67	IP67	IP67	IP67	N/A	N/A	IP67	IP67	N/A
Current Rating	2 ~ 3A	3A	3 ~ 5A	3 ~ 13A	5 ~ 7A	5 ~ 10A	1.5 ~ 3.0A	13 ~ 80A	5 ~ 46A	13 ~ 150A
Voltage Rating	200VAC ~ 320VAC	300VAC	200VAC	200VAC ~ 400VAC	200VAC	250VAC / 350VDC	200VAC ~ 500VAC	100VAC ~ 500VAC	250VAC ~ 900VAC	200VAC ~ 3,000VAC
Durability	5,000 cycles	500 cycles	500 cycles	500 cycles	100 cycles	500 cycles	500 cycles	500 cycles	500 cycles	500 cycles
Lock	Push-pull	Threaded	Push and twist	Push and twist	Screws	Screw	Threaded	Threaded	Bayonet	Threaded
Operating Temp	-55 ~ +85 °C	-30 ~ +85 °C	-20 ~ +125 °C	-20 ~ +125 °C	-20 ~ +130 °C	-25 ~ +85 °C	-55 ~ +85 °C	-55 ~ +125 °C	-55 ~ +125 °C	-55 ~ +125 °C
Wire Size	AWG #22-28	AWG #22-28	AWG #20-28	AWG #14-28	AWG #18-22	AWG #16-20	AWG #4-16	AWG #4-18	AWG #8-26	AWG #0-16
Termination	Solder	Crimp	Crimp / Solder	Crimp / Solder	Crimp / Thru Hole	Solder	Crimp	Solder	Crimp / Solder	Solder
Features	Small size. Unmated waterproof.	EMI Shielding	One-touch locking mechanism	One-touch locking mechanism	Compact and light-weight.	UL approved. 5 insert guide keys.	Mates with MIL-C-5015 standard.	TUV and UL approved	JIS B 6015 compatible.	UL approved. Mates with MIL-C-5015 standard.

Transportation

Socket Housing:	IL-AG5-#S-S3C1	Contacts:	IL-AG5-C1-5000 (socket) IL-AG5-PC1-5000
Pin housing:	IL-AG5-#P-S3C1	S: single row D: double row	
	IL-AG5-#P-S3L2	L: right angle T: straight	
		Hand tool:	CT150-1-AG5
		Semi auto:	3502-AG5-2
		Automatic:	350-AG5-3B

Socket housing:	MX1900#S51	Contacts:	MX19S10K451 (socket) MX19P10K451 (pin)
Pin housing:	MX1900#P51	1: Black 2: Gray	
		Hand Tool:	CT150-4C-MX19
		Semi auto:	3502-MX19-2B

Socket housing:	MX23A##SF1	Contacts:	M23S05K351
Pin header:	MX23A##NF1	1: Standard 2: Reverse	
Front cap:	MX23A##XF1	Hand tool:	CT160-3B-MX23
		Semi auto:	350-MX23-2

Socket housing:	MX340##SF1	Pin header:	MX340##UF1
		U: Straight N: Angled	1: 3-24 pos 2: 28-40 pos
Contacts	Hand Tool	Semi auto	Automatic
M34S75C4F1	CT150-2-MX34	350-MX34D-2	350-MX34B-3B
M34S75C4F2	CT150-1-MX34	350-MX34D-2	350-MX34B-3B
M34S75C4F3	N/A	350-MX34C-2	350-MX34C-3B
M34S75C4F4	N/A	350-MX34C-2	350-MX34C-3B





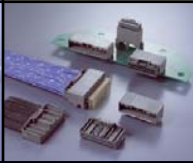


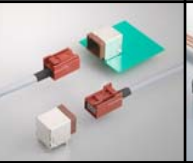

Board Mounting Receptacle:	MX39004NQ1
USB Harness:	MX45004S0008397 (150mm)

Socket housing:	MX3600#SQ3	Contacts:	M36S08K4Q3 (socket) M36P08K4Q3 (pin)
Pin housing:	MX3600#PQ3	Semi auto:	350-MX36-2
Front cap:	MX36004XF3	Automatic:	350-MX36-3B

Socket housing:	MX37004SP3	Contacts:	Socket M37S07K4P3 Pin M37P75C4P3
Pin housing:	MX37004PP3	Semi Auto:	350-MX37S-2 350-MX37P-2
		Automatic:	350-MX37S-3B 350-MX37S-3B

Socket housing:	MX44###SF1	Contacts:	M44S05K4F1
Pin header:	MX44###NF1	Hand Tool:	CT150-2-MX44
Retainer:	MX44###XR1	Semi Auto:	3502-MX44-2
Wire seal:	MX44000XP1	Wire O.D. 1: 1.4-1.5mm 2: 1.6-1.7mm	

Socket housing:	MX31 ### SG A	31, 34, 35 pos	Modification code
Pin header:	MX31 ### N F D	70, 104, 135 pos	Modification code
		F: All Sn plated contacts Q: Selective gold plated contacts	
Contacts	Wire (AWG)	Semi Auto	Automatic
M31S07K4FA (Sn, signal)	#22-20	350-MX31A-2	350-MX31A-3B
M31S07K4QA (Au, signal)	#22-20	350-MX31A-2	350-MX31A-3B
M31S07K4FB (Sn, signal)	#24	350-MX31A-2	350-MX1A-3B
M31S05K3FA (Sn, power)	#18-16	350-MX31B-2	350-MX31B-3B
M31S05K4FA (Sn, power)	#22-18	350-MX31B-2	350-MX31B-3B
M31S05K4QA (Au, power)	#22-18	350-MX31B-2	350-MX31B-3B

Series	IL-AG5	MX19	MX23A	MX31	MX34	MX36	MX37	MX39/MX45	MX44
Photo									
Pitch	2.5mm	2.5mm	2.5mm	Signal: 2.2mm Power: 3.2mm	2.2mm	2.5mm	2.2mm	2.2mm	3.5mm
Wire Size	AWG #22-18 AV,AVS,AVSS: 0.3 to 0.5mm ² AVS, AVSS: 0.85mm ²	AWG #22-20 CAVS: 0.3 to 0.5mm ² AVSS: 0.5mm ²	AWG #22-16 AVSS, AVS: 0.5 to 1.25mm ²	Signal: AWG #22-20 Power: AWG #22-16 Signal: AVS, AVSS, AVX 0.3 to 0.5mm ² Power: AVS, AVSS AVX 0.3 to 1.25mm ²	AWG #22-20 AVSS: 0.3, 0.5mm ² CHFUS: 0.22 to 0.35mm ² , 0.5 to 0.75mm ² CAN SD: 0.35mm ²	AWG #20 AVSS 0.5, AVSS 0.5F, AVSSX 0.5f, TVSSX 0.5f	AWG #20 AVSS 0.5, AVSS 0.5F, AVSSX 0.5f, TVSSX 0.5f	AWG #28 Twin Ax	AWG #22-20 AVSS 0.3 to 0.5mm ²
Pin Count	1 row: 4,5,6, 7,10 2 rows: 14,16, 18,22,30	2, 4	12, 18, 26, 34, 36	Pin: 70,98,104,135 Socket: 31,34,35	3,5,7,12,16,20, 24,28,32,36,40	2, 4	4	4	2, 4, 6
Current Rating	3A	5A	3A	Signal: 2.2A Power: 5.7A	3A	3A	3A	500mA	3A
Operating Temperature	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +125 °C	-40 ~ +85 °C	-40 ~ +85 °C	-40 ~ +105 °C	-40 ~ +105 °C	-40 ~ +85 °C	-40 ~ +125 °C
Application	Cable to Cable/ Board to Cable	Cable to Cable	Board to Cable	Board to Cable	Board to Cable	Cable to Cable	Cable to Cable	Cable to Cable/ Board to Cable	Board to Cable
Features	Mechanical lock system enabling complete mating. Secondary lock mechanism to ensure correct terminal retention. Simplified crimp type termination.	Waterproof. Mechanical lock system. Grommet seal. Terminals have low insertion force and stress dispersion. Rear cover protects the grommet from damage.	Waterproof. Low profile. Available in reverse mount type. Retainer detects incomplete insertion of socket contact.	Mechanical lock system with audible click. Socket side contact designed with secondary lock. Simplified crimp type termination.	Lightweight. Mating and unmating force less than 80N. Closed box socket contact increases mechanical strength. Preset retainer allows easy wire harness assembly.	Waterproof. Spring separates connectors if not correctly mated. Shorting contact eliminates static discharge. Retainer detects incomplete insertion of socket contact.	Mechanical complete mating method. Spring separates connector if not correctly mated. Shorting contact eliminates static discharge. Retainer detects incomplete insertion.	USB 2.0 compatible. Sold as a complete harness with USB standard receptacle.	Single contact waterproof. Compact size. Improved vibration resistance by vibration absorption function of rubber. Secondary lock mechanism.

Technology to Inspire Innovation



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