

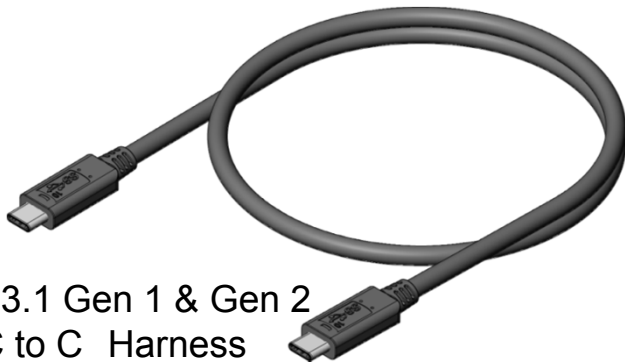


USB Type-C™ DX07 Series Harness

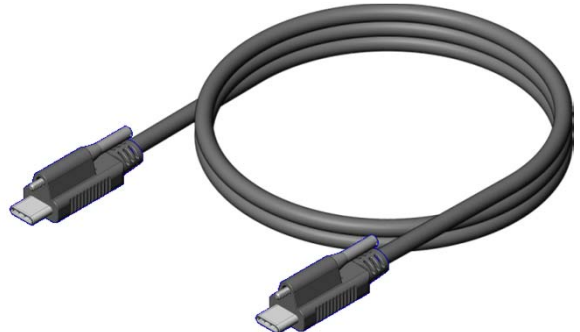
CONNECTOR

MB-0324-4

July 2018

RoHS Compliant

USB 3.1 Gen 1 & Gen 2
C to C Harness



USB 3.1 Gen 1 & Gen 2 C to C
Harness with Screw Lock



USB 3.1 Gen 2
C to Standard-A
Harness

<<Outline>>

The DX07 Series connectors are compatible with the next-generation USB specification "USB Type-C™" and are expected to become popular as a standard interface for various devices.

Note) USB Type-C™ is a trademark of USB Implementers Forum, Inc.

Features

- Compatible with Universal Serial Bus Type-C Specification Release 1.3
- Compatible with USB Power Delivery 3.0
- Compatible with 10Gbps SuperSpeed Plus communication (USB 3.1 Gen2)
- Supports 5A max power supply (Compatible with USB Power Delivery)
- Reversible plug structure with no need to worry about the plug orientation.
- Superior EMI / EMC characteristics.
- Lock structure with superior durability.
- Realizes downsizing of hood.
- Available with a screw lock for securely fixing to the device housing. (The screw lock attachment dimensions conform to the screw lock USB Type-C standard.)

Applicable Markets

Smartphones, tablets, notebook PCs, TV, monitor, gaming devices, external storage mediums, digital cameras, and other small portable devices and industrial equipment

General Specifications

Connector Type	Type-C Plug on Both Ends			
Part Number	DX07518S10N 18747	DX07518S20K 18747	DX07518B10N 19114	DX07518B20K 19114
Length	1m	2m	1m	2m
Rated Current	5 A max.	3 A max.	5 A max.	3 A max.
Applicable Standards	USB 3.1 Gen 2	USB 3.1 Gen 1	USB 3.1 Gen 2	USB 3.1 Gen 1
	USB Power Delivery Rev 3.0			
Material / Color (hood, bushing, and cable jacket)	PVC / Black		TPE / Black	
USB Certification	Certified			Now Planned
TID	5,200,000,570	3,200,000,113	5,210,000,570	-
No. of Contacts for Plug	24 pos.			
Rated Voltage	AC 20 V r.m.s.			
Contact Resistance	Initial 40 mΩ max.			
Dielectric Withstanding Voltage	AC 40 V r.m.s. (for 1 minute)			
Insulation Resistance	Initial 10 MΩ min.			
Operating Temperature Range	+10°C to +40°C		-20°C to +50°C	
Mating Durability	10,000 times			

Connector Type	DX07 Cable Harness with Screw Lock	
Part Number	DX07550B10N19510	DX07550B20K19510
Length	1m	2m
Rated Current	5 A max.	5 A max.
Applicable Standards	USB 3.1 Gen 2	USB 3.1 Gen 1
	USB PD Revision 3.0	
Material / Color (hood, bushing, and cable jacket)	TPE / Black	
USB Certification	Under Planning	
TID	—	
No. of Contacts for Plug	24 pos.	
Rated Voltage	AC 20 V r.m.s.	
Contact Resistance	Initial 40 mΩ or less	
Dielectric Withstanding Voltage	AC 40 V r.m.s. (for 1 minute)	
Insulation Resistance	Initial 10 MΩ min.	
Operating Temperature Range	-20°C to +50°C	
Mating Durability	10,000 times	

Connector Type	Type-C Plug to USB3.1 Standard-A Plug Cable Harness	
Part Number	DX07519S10L19294	DX07519B10L18748
Length	1m	
Rated Current	3 A max.	
Applicable Standards	USB 3.1 Gen 2	
Material / Color (hood, bushing, and cable jacket)	PVC / Black	TPE / Black
USB Certification	Certified	Certified
TID	5,200,000,613	5,200,000,613
No. of Contacts for Plug	USB Type-C side: 24 pos.	
	USB3.1 Standard-A side: 9 pos.	
Rated Voltage	AC 20 V r.m.s.	
Contact Resistance	USB Type-C side: Initial 40 mΩ max.	
	USB3.1 Standard-A side: Initial 50 mΩ max.	
Dielectric Withstanding Voltage	AC 40 V r.m.s. (for 1 minute)	
Insulation Resistance	Initial 10 MΩ min.	
Operating Temperature Range	+10°C to +40°C	-20°C to +50°C
Mating Durability	USB Type-C side: 10,000 times (Based on USB Type-C Standard) USB3.1 Standard-A side: 1,500 times (Based on USB3.1 Standard)	

Materials and Finishes

Component	Material and Finish
Plug	DX07P024AJ5
Paddle Guard	Multi-layer glass-epoxy board
Back Shell	Stainless steel
Locator	Glass-reinforced nylon
Accessory Parts	Heat resistant tape, adhesive, and others
Inner Mold	PA
Outer Mold	PVC Black or TPE Black
Cable Jacket	PVC Black or TPE Black
Screw	Stainless steel

Note: Please refer to the Product Drawings for further details.

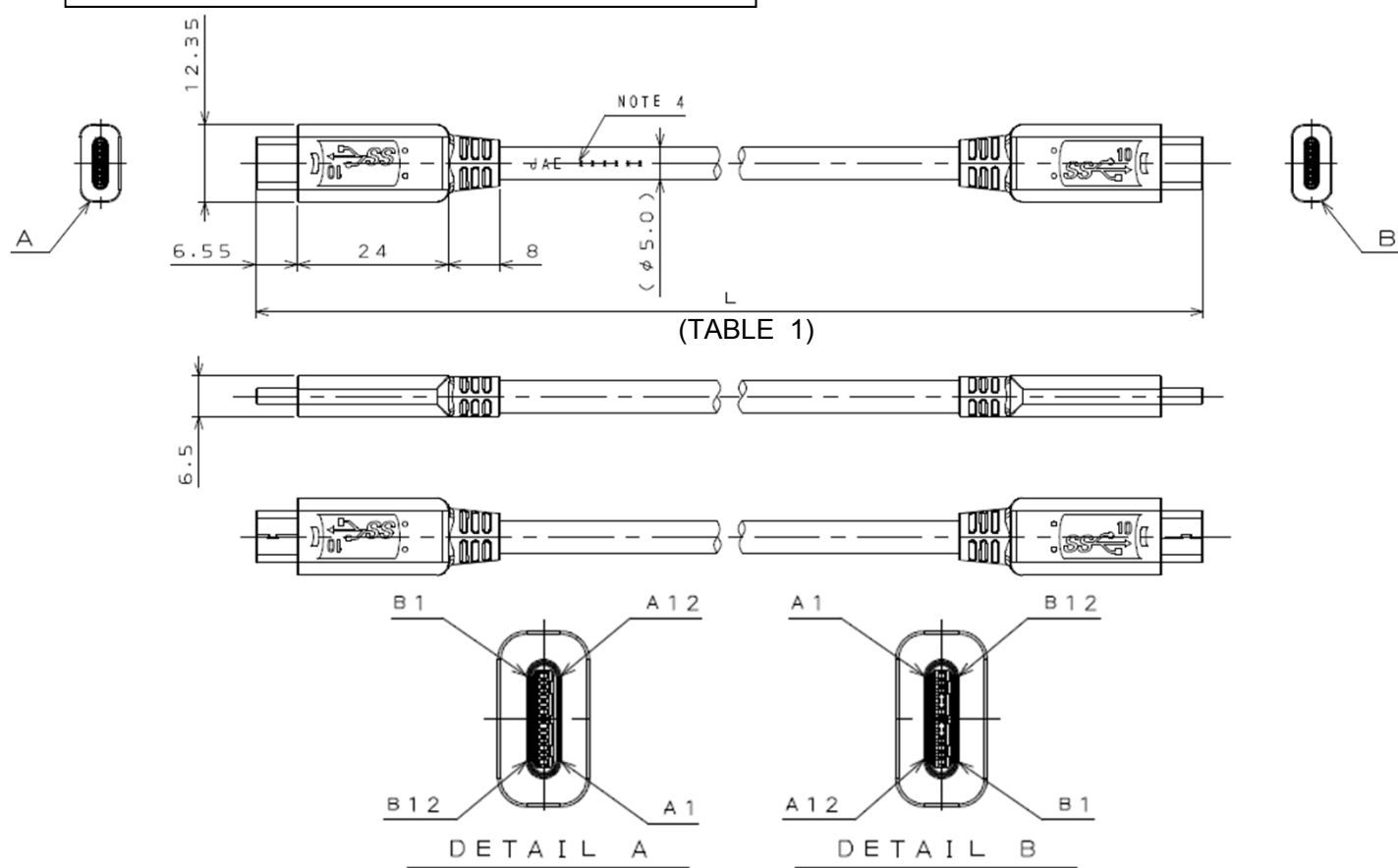
Ordering Information

DX07 5 18 S 10 N *****					
Series					
DX07: USB Type C					Last 5 digits of the Drawing Number
5: Plug					
18: USB3.1 C to C 19: USB3.1 C to A 50: USB3.1 C to C with screw lock					N: Gen2 5A / K: Gen1 3A L: Gen2 3A
S: PVC Black / B: TPE Black					10: 1000mm / 20: 2000mm

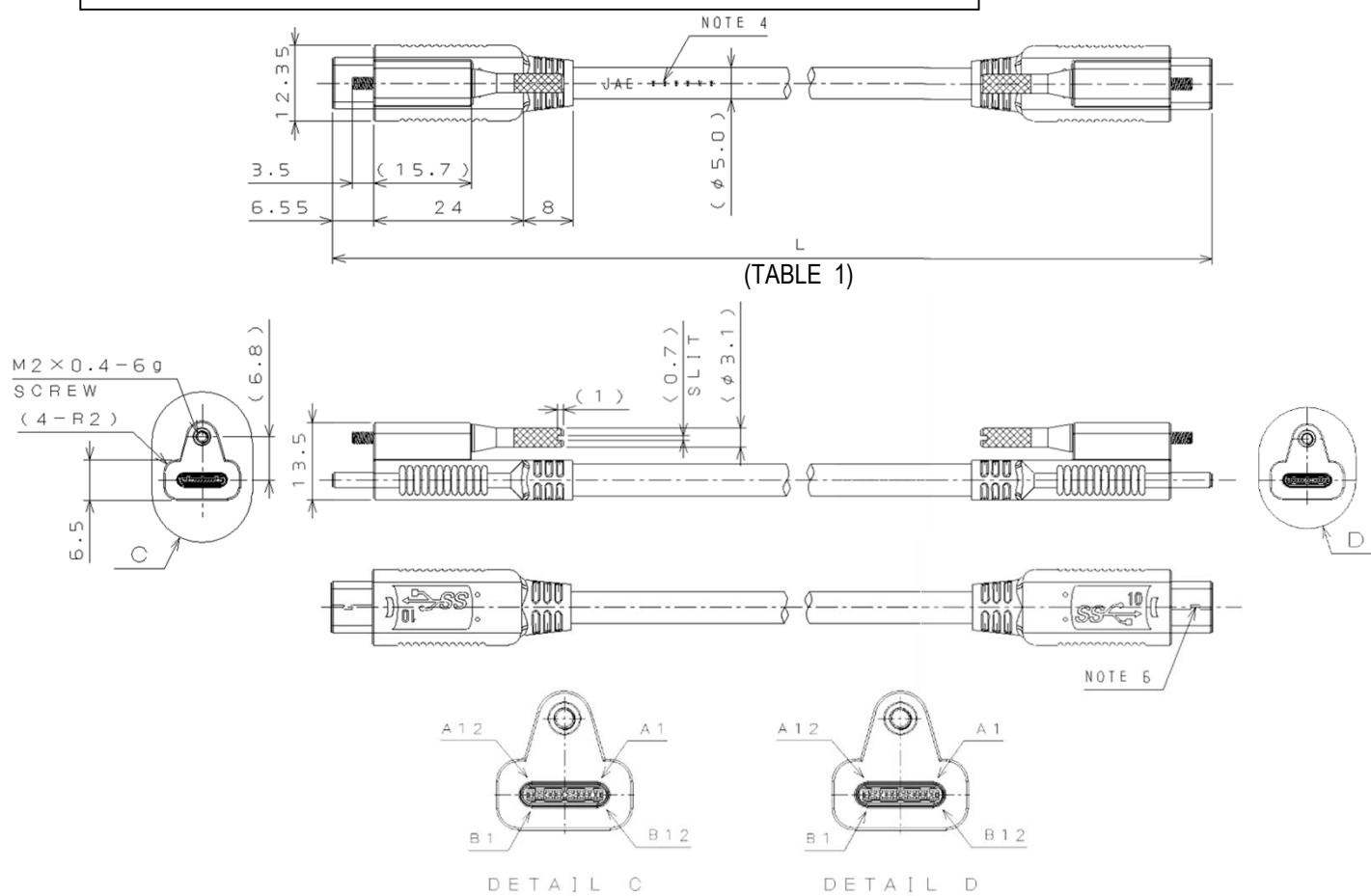
Harness Type	Part Number	Drawing No.	Specifications
USB Type-C To USB Type-C	DX07518S10N18747	SJ118747	JACS-40186
	DX07518S20K18747		
	DX07518B10N19114	SJ119114	
	DX07518B20K19114		
USB Type-C to USB Type-C (with screw lock)	DX07550B10N19510	SJ119510	
	DX07550B20K19510		
USB Type-C to USB 3.1 Standard-A	DX07519S10L19294	SJ119294	JACS-40187
	DX07519B10L18748	SJ118748	

Product Drawing (Type-C to Type-C)

Unit: mm



Product Drawing (Type-C to Type-C (with screw lock))



- NOTE1. CIRCUIT SCHEMATIC OF PADDLE CARD IS SHOWN IN TABLE2.
 2. THIS CABLE ASSEMBLY IS FOR "USB3.1 TYPE-C TO TYPE-C" SPEC and "USB Type-C Locking Connector" SPEC.
 3. USB VERSION AND USB LOGO VERSION ARE SHOWN IN TABLE1.
 4. LOT NUMBER IS MARKED BETWEEN EACH OUTER MOLD.
 5. 100% OPEN, SHORT & MIS-WIRE TEST.
 6. DIRECTION OF SHELL JOINT IS OPTIONAL.
 7. RECOMMENDED SCREW TIGHTENING TORQUE:0.2~0.25N·m.
 (APPLY TO THE CABLE WITH SCREW LOCK)

LOT No.

6T 7 9 07

DAY

MONTH(Oct.:0, Nov.:X, Dec.:Y)

YEAR

PRODUCTION AREA

TABLE 1

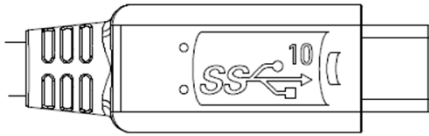
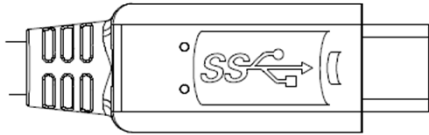
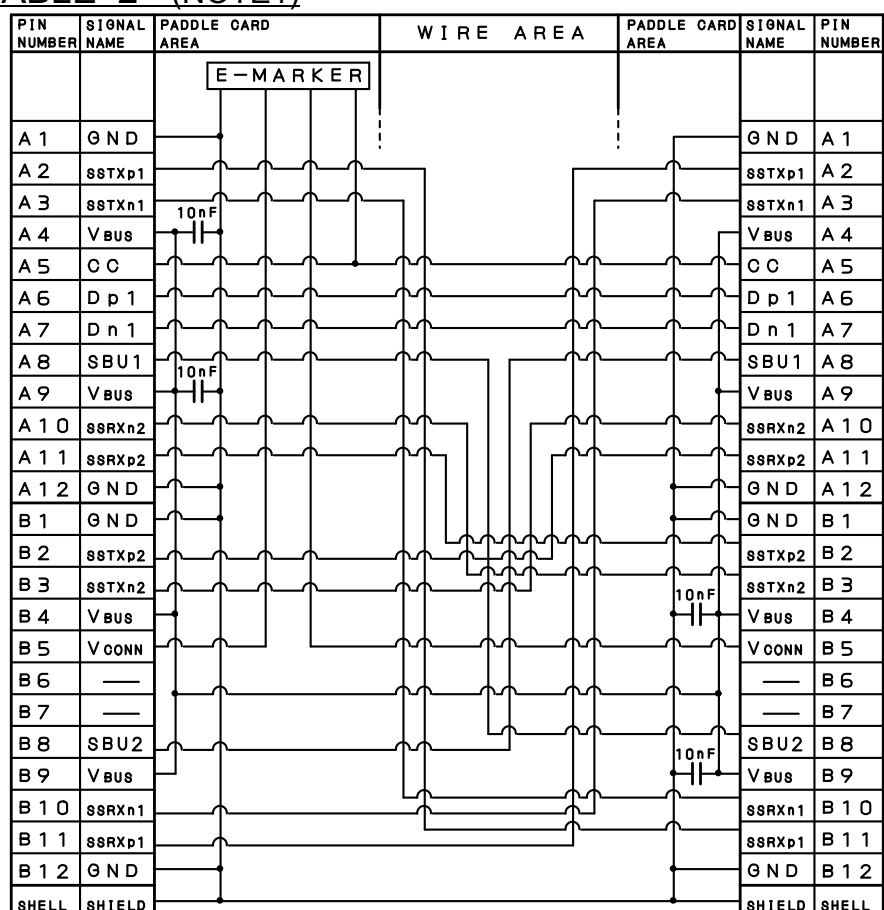
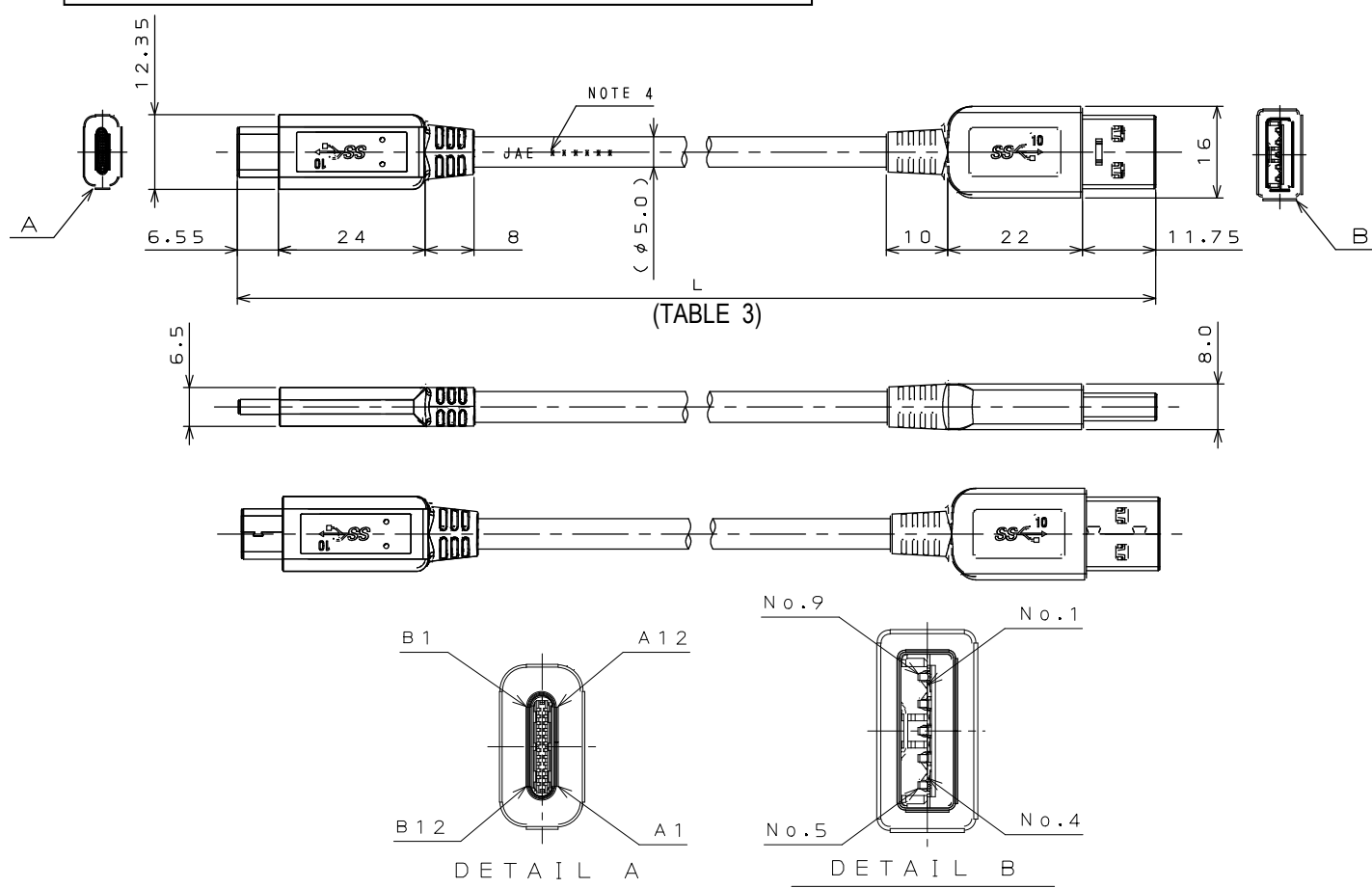
Part Number	L	USB Version	USB Logo
DX07518S10N18747	1000	USB 3.1 Gen 2	
DX07518B10N19114			
DX07550B10N19510			
DX07518S20K18747	2000	USB 3.1 Gen 1	
DX07518B20K19114			
DX07550B20K19510			

TABLE 2 (NOTE1)



Product Drawing (Type-C to Standard-A)

Unit: mm



- NOTE1. CIRCUIT SCHEMATIC OF PADDLE CARD IS SHOWN IN TABLE4.
 2. THIS CABLE ASSEMBLY IS FOR "USB3.1 TYPE-C TO STANDARD-A" SPEC.
 3. USB VERSION AND USB LOGO VERSION ARE SHOWN IN TABLE3.
 4. LOT NUMBER IS MARKED BETWEEN EACH OUTER MOLD.
 5. 100% OPEN, SHORT & MIS-WIRE TEST.

LOT No.
 6 V 7 9 0 7
 DAY
 MONTH (Oct.:0, Nov.:X, Dec.:Y)
 YEAR
 PRODUCTION AREA

TABLE 3

Part Number	L	USB Version	USB Logo
DX07519S10L19294	1000	USB 3.1 Gen 2	
DX07519B10L18748			

TABLE 4 (NOTE1)

TYPE - C			WIRE AREA	STD. - A	
PIN NUMBER	SIGNAL NAME	PADDLE CARD AREA		SIGNAL NAME	PIN NUMBER
A 1	GND			V BUS	1
A 2	SSTXp1			D n 1	2
A 3	SSTXn1			D p 1	3
A 4	V BUS			GND	4
A 5	CC	56kΩ		SSRXn	5
A 6	D p 1			SSRXp	6
A 7	D n 1			GND	7
A 8	SBU1			SSTXn	8
A 9	V BUS			SSTXp	9
A 10	SSRXn2				
A 11	SSRXp2				
A 12	GND				
B 1	GND				
B 2	SSTXp2				
B 3	SSTXn2				
B 4	V BUS				
B 5	V CONN				
B 6	—				
B 7	—				
B 8	SBU2				
B 9	V BUS				
B 10	SSRXn1	10nF			
B 11	SSRXp1				
B 12	GND				
SHELL	SHIELD			SHIELD	SHELL

Notice:

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this brochure are designed for the uses recommended below.

We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as:

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

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