

# NETBridge+<sup>®</sup> Automotive Ethernet Connector System

## USCAR-2 COMPLIANT AUTOMOTIVE ETHERNET CONNECTORS

NETBridge+<sup>®</sup> Automotive Ethernet Connector System is designed for automotive applications and can transmit up to 100Mb/s and 1Gb/s according to IEEE 100BASE-T1 and 1000BASE-T1 and will be upgraded to 10Gb/s.

These Automotive-grade Ethernet Connector Systems use single pair cables to transmit data. NETBridge+<sup>®</sup> is developed according to USCAR-2 and Ethernet specifications, and is offered in miniaturized and sealed configurations.

- Fully shielded versions and small form factor
- Temperature range -40°C to +100°C in sealed and unsealed configurations
- USCAR-T2V1 compatible
- Connector Position Assurance (CPA)



### TARGET MARKETS



### FEATURES

- Offers higher data transmission rate
- Scalable port options with 1x1 to 1x3 and 2x2 to 2x3 ports for right angle and vertical configurations
- Touch proof design
- Fully shielded versions
- Mechanical and visible color coding
- Mechanical and robust design
- CCPA for secondary lock of contact carrier
- Small form factor

### BENEFITS

- Suitable for automotive grade Ethernet applications
- Design flexibility
- Contact pin protection
- Improved signal performance
- Avoids mismatching
- Easy installation
- Ensures proper connector assembly
- Saves board space

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High Temperature thermoplastic
- Contacts: Copper Alloy
- Board Lock: Copper Alloy

### MECHANICAL PERFORMANCE

- Mating Force: 75N max.
- Withdrawal Force: 1N min.
- Durability: 25 cycles min.

### ELECTRICAL PERFORMANCE

- Insulation Resistance: Not be less than 100MΩ.
- Contact Current Rating: 3A max.
- Dielectric Withstanding Voltage: 500VAC

### APPROVALS AND CERTIFICATIONS

- USCAR-2 Compliant
- IATF Production Compliant
- RoHS
- REACH/SVHC
- Low-halogen

### ENVIRONMENTAL

- Temperature/Humidity: 40 cycles between -40°C to +100°C, Relative Humidity 0% to 95%
- Vibration: V1 Class
- Thermal Shock: 100 cycles between -40°C to 100°C

### SPECIFICATIONS

- Product Specification: S-NTH-001
- Packaging Specification: PKSNTN005, PKSNTN006

### PACKAGING

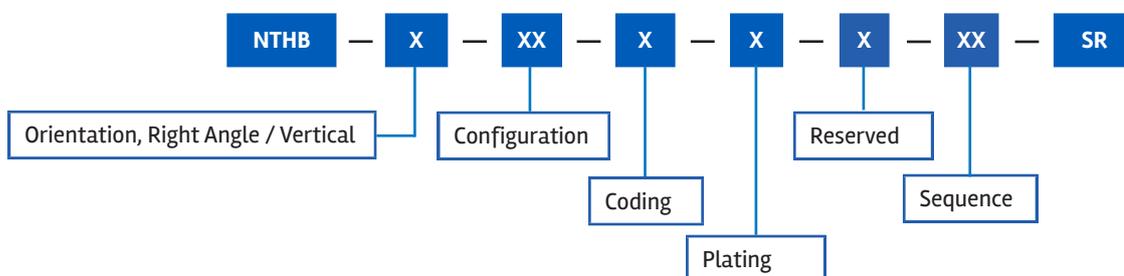
- Board Connector: Reel

### TARGET MARKETS/APPLICATIONS



Camera Module  
Infotainment  
LiDAR  
mmWave Radar  
BCU (Body Control Unit)  
ZCU (Zone Control Unit)  
Advanced Driver Assistance Systems (ADAS)

## PART NUMBER SELECTOR



## PART NUMBERS – PCB SIDE CONNECTOR

Description	Data Rate	Code	Part Numbers
NETBridge+® 1x1 VT Sealed with Cap	100M/1G	A	NTHBV11A10C1SR
NETBridge+® 1x1 VT Unseal with Cap	100M/1G	A	NTHBV11A10C2SR
NETBridge+® 1x1 RA Panel Mount Sealed	100M/1G	A	NTHBR11A161USR
NETBridge+® 1x1+6 90D Panel Mount Sealed	100M/1G	A	NTHBRA6A19B4SR
NETBridge+® 1x1+6 RA Panel Mount Sealed	100M/1G	A	NTHBRA6A1601SR
NETBridge+® 1x1+6 VT Panel Mount Sealed	100M/1G	A	NTHBVA6A16TUSR
NETBridge+® 1x1 RA Sealed	100M/1G	A	NTHBR11A1110SR
NETBridge+® 1x1 RA Unsealed	100M/1G	A	NTHBR11A1111SR
NETBridge+® 1x2 RA Sealed	100M/1G	A	NTHBR12A1110SR
NETBridge+® 1x2 RA Unsealed	100M/1G	A	NTHBR12A1111SR
NETBridge+® 1x3 RA Unsealed	100M/1G	A	NTHBR13A1111SR
NETBridge+® 2x2 RA Sealed	100M/1G	A	NTHBR22A1110SR
NETBridge+® 2x2 RA Sealed	100M/1G	B	NTHBR22B1110SR
NETBridge+® 2x2 RA Unsealed	100M/1G	A	NTHBR22A1111SR
NETBridge+® 2x2 RA Unsealed	100M/1G	B	NTHBR22B1111SR
NETBridge+® 2x3 RA Sealed	100M/1G	A	NTHBR23A1110SR
NETBridge+® 2x3 RA Sealed	100M/1G	B	NTHBR23B1110SR
NETBridge+® 2x3 RA Unsealed	100M/1G	A	NTHBR23A1111SR
NETBridge+® 2x3 RA Unsealed	100M/1G	B	NTHBR23B1111SR