

# NETBridge<sup>™</sup> Automotive Ethernet Connector System

## COMPLIANT WITH USCAR-2 SPECIFICATIONS; IDEAL FOR AUTOMOTIVE APPLICATIONS

NETBridge<sup>™</sup> Automotive Ethernet Connector System is designed for the automotive environment and can transmit up to 100Mbit/s and 1Gbit/s according to IEEE 100BASE-T1 and 1000BASE-T1. These automotive grade Ethernet connection system uses twisted-pair cables to transmit data. NETBridge<sup>™</sup> is developed in accordance with USCAR-2, VDAAK LV214 and ISO 8092-2.

- 0.50mm x 0.40mm tab terminal system
- Temperature range -40°C to +100°C in sealed and unsealed configurations
- 10G+ and waterproof versions are in development
- CCPA for secondary lock of contact carrier assembly
- Optional CPA for secondary lock in mated condition



#### **FEATURES**

- Automotive grade Ethernet application
- Scalable port options with 1x1 to 1x7 ports for right angle and vertical connectors; 1x1, 1x5 for inline adaptor
- Touch proof design
- Mechanical and visible color coding
- Mechanically robust design
- CCPA for secondary lock of contact carrier

#### **BENEFITS**

- Offers higher data transmission rate
- Design flexibility
- Contact pin protection
- Avoids mismating
- Easy installation
- Ensures proper connector assembly

#### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Housing: High temperature thermoplastic, UL 94V-0
- Contacts: Brass
- Shell: Phosphor Bronze

#### **MECHANICAL PERFORMANCE**

- Retention Force >= 110 Newtons
- Unmating Force <= 75 Newtons</li>
- Durability: 10 cycles

#### **ELECTRICAL PERFORMANCE**

- Low Level Contact Resistance:  $15m\Omega$  max.
- Contact Current Rating: 3A
- Dielectric Withstanding Voltage: 500VAC

#### **PACKAGING**

- Tray
- Tape & Reel

#### **SPECIFICATION**

■ Amphenol Product Specification: NETBridge™ series

#### **ENVIRONMENTAL**

- 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

#### **APPROVALS AND CERTIFICATION**

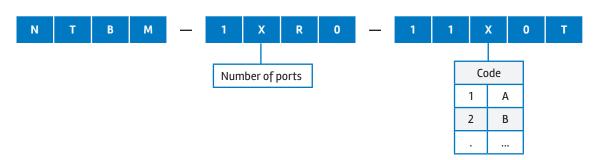
- USCAR-2 Compliant
- IATF Production Compliant
- RoHS
- REACH/SVHC
- Low Halogen

#### **TARGET MARKETS/APPLICATIONS**



Body Control
Safety
Security and Comfort
Advanced Driver Assistance Systems (ADAS)
Infotainment

### PART NUMBER SELECTOR



# **▶** NETBridge<sup>™</sup> Automotive Ethernet Connector System

## **PART NUMBERS**

## **PCB Side Connector**

Description	Data Rate	Code	Part Numbers
NETBridge™, 1x1, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM11R0U01110T
NETBridge™, 1x2, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM12R0U01110T
NETBridge™, 1x3, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM13R0U01110T
NETBridge™, 1x4, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM14R0U01110T
NETBridge™, 1x5, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM15R0U01110T
NETBridge™, 1x6, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM16R0U01110T
NETBridge™, 1x7, Right Angle, DIP, 100Mbit/s, Code A	100M	Α	NTBM17R0U01110T
NETBridge™, 1x1, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM11R1U01110T
NETBridge™, 1x2, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM12R1U01110T
NETBridge™, 1x3, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM13R1U01110T
NETBridge™, 1x4, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM14R1U01110T
NETBridge™, 1x5, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM15R1U01110T
NETBridge™, 1x6, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM16R1U01110T
NETBridge™, 1x7, Right Angle, DIP, 1Gbit/s, Code A	1G	Α	NTBM17R1U01110T

## **PCB Side Vertical Connector**

Description	Data Rate	Code	Part Numbers
NETBridge™, 1x1, Vertical, DIP, Code A	100M	Α	NTBM11V1U01110T
NETBridge™, 1x5, Vertical, DIP, Code A	100M	Α	NTBM15V1U01110T

## Standard cable

Description	Length	Code	Part Numbers
NETBridge™ 1x1 to 1x1 Cable	1001mm	Α	CAAN21111111000
NETBridge™ 1x2 to 1x2 Cable	1001mm	Α	CAAN22112111000
NETBridge™ 1x3 to 1x3 Cable	1002mm	Α	CAAN23113111000
NETBridge™1x4 to 1x4 Cable	1003mm	Α	CAAN24114111000
NETBridge™ 1x5 to 1x5 Cable	1004mm	Α	CAAN25115111000
NETBridge™ 1x6 to 1x6 Cable	1005mm	Α	CAAN26116111000
NETBridge™ 1x7 to 1x7 Cable	1006mm	Α	CAAN27117111000

# **Inline Adaptor**

Description	Code	Part Numbers
NETBridge™, 1X1, Inline Adaptor	A+B	NTBA1120002T
NETBridge™, 1X5, Inline Adaptor	A+B	NTBA1520002T