

# microSD Express Connector

## HIGH PERFORMANCE MEMORY CARD CONNECTOR COMPLIANT TO SD SPECIFICATION V7.1

Amphenol ICC is the first in the industry to offer card sockets for both microSD Express and Micro SD cards (UHS-I). The 17 pin microSD Express connector is capable of achieving high speeds up to 985MB/s and meeting PCIe® 3.0 requirements. The connector enables microSD Express platform to reach its full potential; making microSD Express card possible to serve as a removable Solid State Drive (SSD). This new platform is ideal for high resolution content and speed-hungry mobile computing and IOT devices.

- Data Rate: 8GT/s (PCIe® Gen 3 requirement)
- Supports card-detect function
- Backward compatibility and interoperability with legacy Micro SD cards

### FEATURES

- New 17 pin connector design
- Dedicated pin for card detect function
- Backwards compatible with the legacy Micro SD card (UHS-I)
- Data transfer speed of up to 8GT/s
- Robust mating mechanism that ensures reliable connection
- Up to 5000 mating cycles
- Lead and halogen-free



### BENEFITS

- Supports next generation performance
- SD host is in deep low-power mode until the card is inserted
- Provides higher adaptability and practicability
- Approximately 6x faster than existing Micro SD card
- Specially targets demanding application that requires high speed and storage capacities
- High durability
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic, UL94V-0, black
- Contact: Corson alloy
- Shell: Stainless steel

### MECHANICAL PERFORMANCE

- Durability: 5000 mating cycles
- Normal Force: 30gf/pin min.

### ELECTRICAL PERFORMANCE

- Contact Resistance: 100mΩ max.
- Dielectric Withstanding Voltage: 500V AC max. (1 minute)
- Insulation Resistance: 1000mΩ min.
- Current Rating: 0.5A AC/DC max.
- Voltage Rating: 100V rms min.

### PACKAGING

- Tray/Tape

### ENVIRONMENTAL

- Storage Temperature: -40°C to +85°C
- Operating Humidity Range: 95% R.H. max.
- Operating Temperature Range: -25°C to +85°C

### APPROVALS AND CERTIFICATIONS

- RoHS compliant

### TARGET MARKETS/APPLICATIONS



Mobile Phone  
Tablet  
Virtual Reality Camera  
Augmented Reality Camera  
Unmanned Aerial Vehicle (UAV)  
IoT Devices  
Mobile Computing Devices  
Surveillance Cameras

## PART NUMBERS

Description	Part Numbers
microSD Express connector, SMT, push-pull, with card detect, PCIe® 3.0 ready, backward compatibility with Micro SD cards	101019966912A