

ExtremePort™ Flash Connector

NEXT-GENERATION NEAR CHIP HIGH SPEED SOLUTION – UP TO 56G PAM4

Amphenol ICC introduces the next-generation OverPass™ solution—ExtremePort™ Flash. The 0.60mm pitch connector comes with an extreme low profile design capable of transmitting high-speed signal up to 56G PAM4, and allows much greater signal path lengths, while maintaining SI performance when compared to conventional PCB routing methods.

ExtremePort™ Flash not only provides a SI performance ready signal transmission but also a new way of system design that is cost-effective, highly modular, scalable, and extremely easy to repair.

- High speed – 56Gb/s PAM4 capability
- Extremely low profile that provide high speed transmission under the condition of extreme mechanical space limitation

FEATURES

- 0.60mm pitch right angle configuration, with 4.50mm height for dual row
- Up to 56Gb/s PAM4, over 1.0 meter transmission distance
- Supports both cable and card edge applications with one identical connector
- With 95Ω impedance and meets PCIe®/NVMe/SAS/SFP(+)/QSFP specifications



TARGET MARKETS



BENEFITS

- Extreme low profile for extreme mechanical space limitation
- Extends transmission range far more over the conventional PCB routes
- Provides flexibility in system design to meet highly modular, scalable and easy-to-repair requirements
- Saves system material cost, engineering and certification expenses with high succession of system design

TECHNICAL INFORMATION

MATERIAL

- Contact Base Metal: Copper alloy
- Contact Area Finish: Gold over nickel
- Solder Area Finish: Tin over nickel
- Housing & Spacer: High temperature thermoplastic (UL 94V-0)
- Shorting Bar: Conductive plastic
- Cage: Stainless steel, nickel plating overall

ELECTRICAL PERFORMANCE

- Contact Resistance: 30mΩ max. initial; 15mΩ max. change after test
- Dielectric Withstanding Voltage: 300V DC

MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 0.6N/pin max.
- Unmating Force: 0.06N/pin min.

ENVIRONMENTAL

- Humidity: EIA-364-31, Method III, subject unmated specimens to 24 cycles between 25°C/ 80%RH and 65°C/ 50% RH
- Temperature Life: EIA-364-17, Method A test condition 2, test time condition C, subject mated specimens to 105°C for 168 hours
- Thermal Shock: EIA-364-32, Method A test condition 1, -55°C to 85°C (10 cycles)

APPROVALS & CERTIFICATION

- UL

SPECIFICATIONS

- Amphenol Product Specification: PS-7681

PACKAGING

- Carrier Tape

TARGET MARKETS/APPLICATIONS



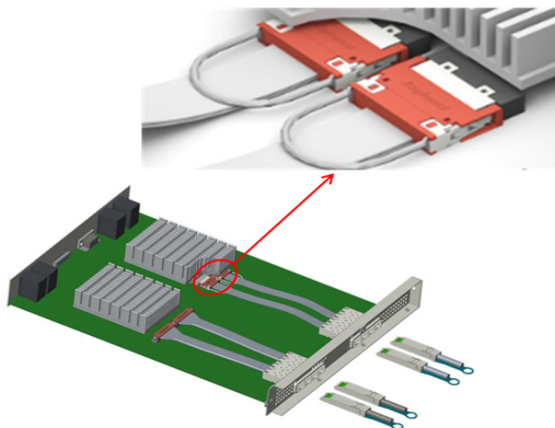
Baseband
Commercial Systems
Networking
Radio Units



High-end Computing System
Server and Storage Systems

Amphenol OverPass™ Applications

Low profile connector design meets extreme mechanical space limitation

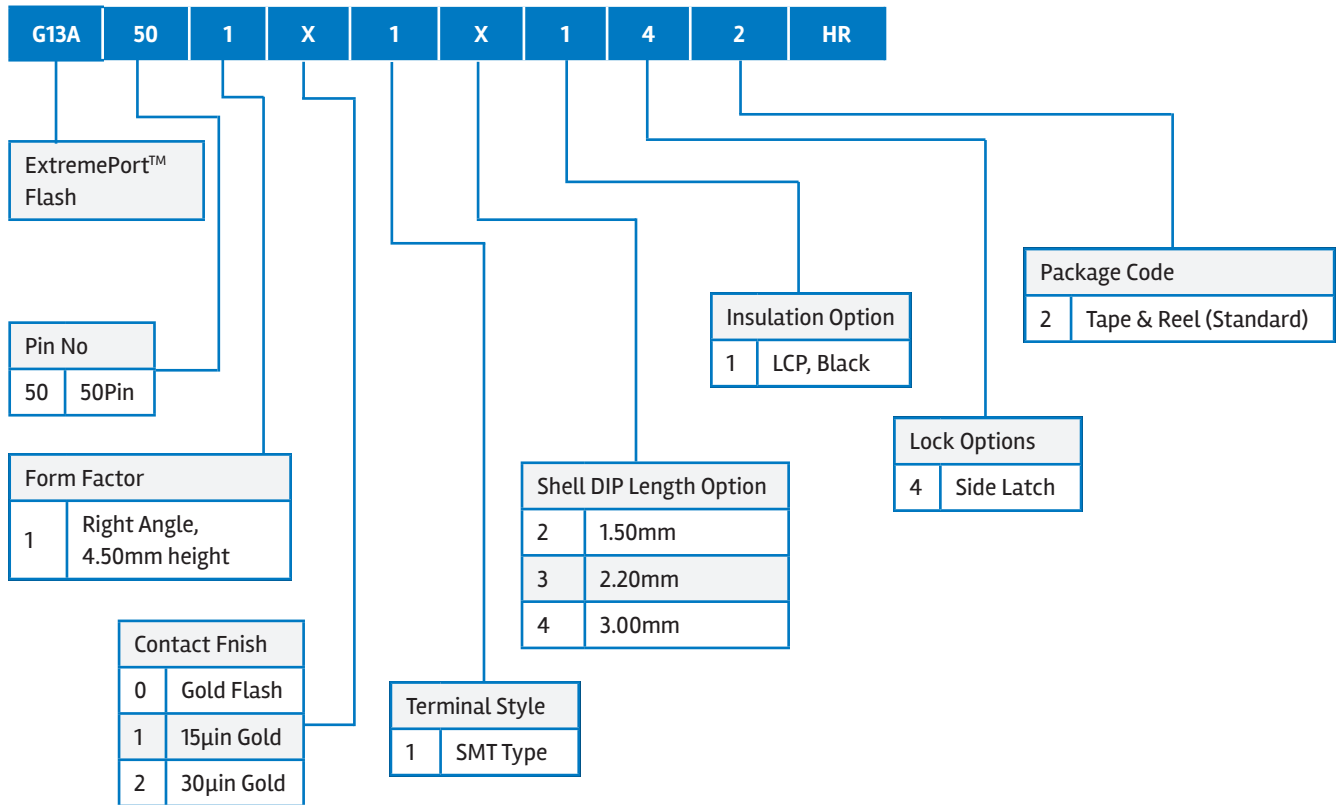


Cable Option – Internal Connection



Cable Option – ASIC to I/O Connection

PART NUMBER SELECTOR



PART NUMBERS

Speed	Impedance	Form Factor	No. of Pins	Contact Finish	Shell DIP Length		
					1.50mm	2.20mm	3.00mm
PAM4 56G	95Ω	Right Angle, 4.50mm height	50	Gold 15µin	-	-	-
				Gold 30µin	-	G13A501212142HR	-