

Lynx™ QD

THE QUAD DIFFERENTIAL SOLUTION

Optimized for differential pair signaling, Lynx™ QD sets a new standard for density and flexibility that offers an innovative, high performance interconnect with PCIe® Gen 5 support. Lynx™ QD supports data rates of 56 Gb/s PAM4 and provides a 4 row differential signaling structure, in a compact 2 row footprint. Currently available in right angle, coplanar and vertical stacker form factors with 12, 20, 40, 60 and 80 differential pairs, Amphenol ICC's Lynx™ QD delivers the flexibility to solve even the toughest design requirements. Mezzanine versions in 4mm–15mm stack heights will be launched soon.

- Optimized for differential pair signaling, configurable for open pin field
- Provides multiple design options for developers, including flex/cable options
- Conforms to PCIe® Gen 5 standard
- Robust mechanical strength and sustained signal integrity across all form factors
- Delivers fast time-to-market options for system design



TARGET MARKETS



FEATURES

- Supports 56 Gb/s PAM4, PCIe® Gen 5
- Optimized for differential pair signaling
- High-density, compact footprint
- Available in multiple form factors
- Features alignment block
- Comes with integrated guide posts
- Available with PCB alignment clips
- Wide ground contacts allowing routing from both sides of the connector
- Integrated flex/cable options available

BENEFITS

- Delivers superior performance and an upgrade path to future system designs
- High density, compact footprint that is also configurable for open pin field applications
- 12 to 80 differential pair modules
- 36 to 240 conductors
- Promotes application flexibility
- Guarantees proper alignment and mating
- Allows for multiple connector configurations
- Provides stability/mechanical strength
- Reduces PCB layer count
- Promotes design flexibility

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance copper alloy
- Housings: High temperature reinforced polyester (Liquid Crystal Polymer)

MECHANICAL PERFORMANCE

- 4-Row 0.90mm pitch, 20 to 80 differential pairs
- Normal Force: 25g per pin EOL
- Mating Force: 27g per pin typical
- Mechanical Wipe: 0.50mm

ELECTRICAL PERFORMANCE

- Supports 56Gb/s PAM4, PCIe® Gen 5
- Impedance: 92Ω
- Current rating: 1.5A per pin

PACKAGING

- Tape & Reel

SPECIFICATION

- TB-2346 Lynx™ QD Product Specification
- TB-2345 Lynx™ QD Application Specification
- TB-2353 Lynx™ QD Routing Guide

ENVIRONMENTAL

- Operating Temperature Range: -55°C to 105°C
- Flammability Rating: 94BV-0
- RoHS compliant
- Lead-free solder

TARGET MARKETS/APPLICATIONS



Car Navigation Systems



Telecom
Datacom
Switches and Routers



Entertainment
PC
Gaming Machine
Test Equipment



Routers and Servers
Data Center Network



Imaging

PART NUMBER SELECTOR

Right Angle Plug: (Released)

IC13411	0	X	X
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Position	
1	12
2	20
4	40
6	60
8	80

Assembly Type	
1	Regular (with guide pins) & Lossy
2	Regular (with guide pins) & No lossy
3	Short (without guide pins) & Lossy
4	Short (without guide pins) & No lossy

Right Angle Receptacle: (Released)

IC13416	0	X	X
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Position	
2	20
4	40
6	60
8	80*

Assembly Type	
1	Regular (with guide pins) & Lossy
2	Regular (with guide pins) & No lossy
3	Short (without guide pins) & Lossy
4	Short (without guide pins) & No lossy

*In development

Stacker/Mezzanine Plug: (In Development)

IC13423	X	X	X	Z
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Stacked Height	
A	4mm
B	5mm
C	6mm
D	7mm
E	8mm
F	9mm
G	10mm**
H	11mm
I	12mm
J	13mm
K	14mm
L	15mm

Position	
1	12
2	20
4	40**
6	60
8	80

Optional Retention Pin	
0	No retention pin
1	Short retention pin
2	Long retention pin

Assembly Type	
1	Regular (with guide pins) & Lossy
2	Regular (with guide pins) & No lossy
3	Short (without guide pins) & Lossy
4	Short (without guide pins) & No lossy

**Released

Stacker/Mezzanine Receptacle: (Released)

IC13427	0	X	X	Z
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Position	
1	12
2	20
4	40
6	60
8	80

Optional Retention Pin	
0	No retention pin
1	Short retention pin
2	Long retention pin

Assembly Type	
1	Regular (with guide pins) & Lossy
2	Regular (with guide pins) & No lossy
3	Short (without guide pins) & Lossy
4	Short (without guide pins) & No lossy

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