# Lynx<sup>™</sup> 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 PCle® 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
- 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



FEATURES	BENEFITS
----------	----------

FEATURES	BENEFIIS
Supports 56 Gb/s PAM4, PCIe® Gen 5	<ul> <li>Delivers superior performance and an upgrade path to future system designs</li> </ul>
<ul> <li>Optimized for differential pair signaling</li> </ul>	<ul> <li>High density, compact footprint that is also configurable for open pin field applications</li> </ul>
<ul> <li>High-density, compact footprint</li> </ul>	<ul><li>12 to 80 differential pair modules</li><li>36 to 240 conductors</li></ul>
<ul> <li>Available in multiple form factors</li> </ul>	<ul> <li>Promotes application flexibility</li> </ul>
■ Features alignment block	Guarantees proper alignment and mating
<ul> <li>Comes with integrated guide posts</li> </ul>	<ul> <li>Allows for multiple connector configurations</li> </ul>
<ul> <li>Available with PCB alignment clips</li> </ul>	<ul><li>Provides stability/mechanical strength</li></ul>
<ul> <li>Wide ground contacts allowing routing from both sides of the connector</li> </ul>	• Reduces PCB layer count
<ul> <li>Integrated flex/cable options available</li> </ul>	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 EOLMating Force: 27g per pin typical

• Mechanical Wipe: 0.50mm

#### **ELECTRICAL PERFORMANCE**

Supports 56Gb/s PAM4, PCIe® Gen 5

• Impedance:  $92\Omega$ 

• 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



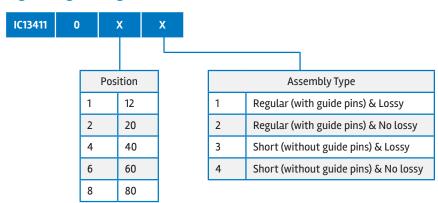
Routers and Servers Data Center Network



**Imaging** 

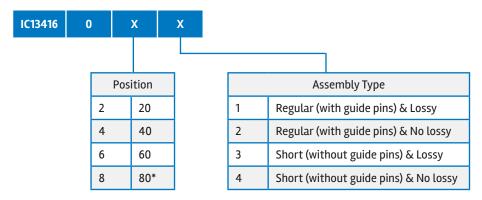
## **PART NUMBER SELECTOR**

# Right Angle Plug: (Released)



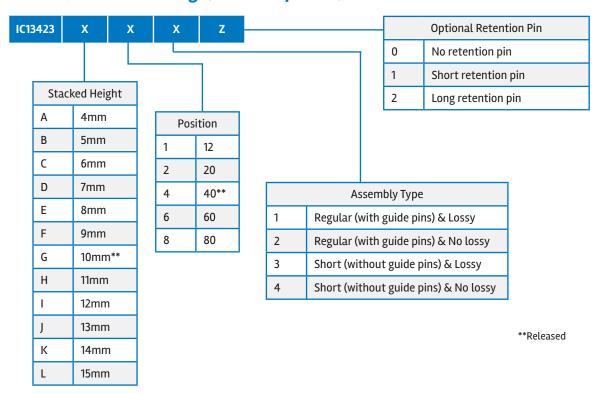
# **Lynx**<sup>™</sup> QD

# Right Angle Receptacle: (Released)



\*In development

# Stacker/Mezzanine Plug: (In Development)



# Stacker/Mezzanine Receptacle: (Released)

