

Quick Reference Guide

O.6mm Centerline High Speed CHAMP Docking Connector

The docking connector series is designed for high density, low profile (3.8mm) shielded applications featuring two rows of contacts on 0.6mm pitch centerlines. Contacts on a 0.6mm centerline can save 30% of linear board space, while the 3.8mm low profile housing reduces connector height by approximately 25% when compared with the 0.8mm centerline laptop PC docking series connector. Multiple options are available including right angle receptacles, right angle offset receptacles, and a vertical plug for dock and cable.

When compared with the 0.5mm pitch docking connector, TE Connectivity's (TE's) 0.6mm pitch product is more reliable and performs better in high frequency signals.

TE's 0.6mm centerline high speed CHAMP docking connector is designed to meet various industry transmission standards including USB 3.0, HDMI (high definition multimedia interface) and DisplayPort.

FEATURES

- Side latches provide greater retention
- Signal/ground for EMI prevention
- Housing design prevents improper mating
- Guide rails aid mating alignment

BENEFITS

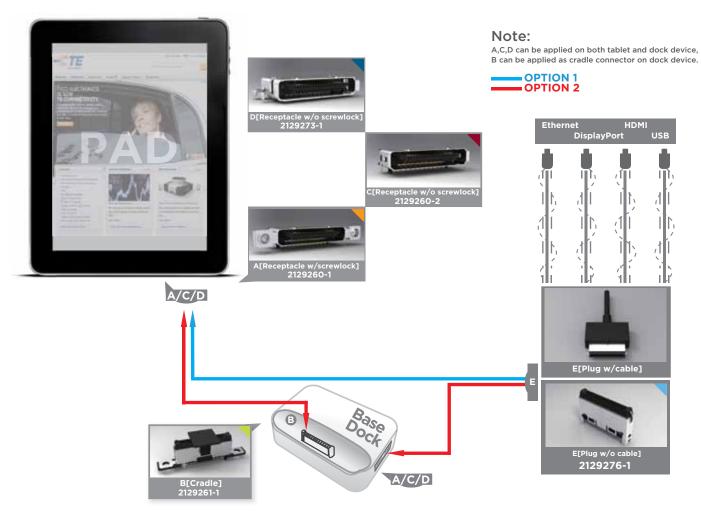
- $\bullet \ \mathsf{USB} \ 3.0 \ transmission \ \mathsf{compliance}$
- High definition differential signal of HDMI, DisplayPort transmission compliance
- 10,000 mating cycles

APPLICATIONS

- Tablet PC
- Laptop PC
- MID (Mobile Internet Devices)
- Converged mobile phone



Application



O.6mm Centerline High Speed CHAMP Docking Connector								
	Part Number	Туре	Mount Style	Direction	Description	Finish	Package	Mating Parts
O D	2129260-1	Receptacle	2-Row T/H, 1-Row SMT	Right-angle	With screwlock	15 μ Au &Sn	T&R	2129261-1, 2129276-1
	2129260-2	Receptacle	2-Row T/H, 1-Row SMT	Right-angle	Without screwlock	15 μ Au &Sn	T&R	2129261-1, 2129276-1
	2129273-1	Receptacle	2-Row T/H, 1-Row SMT	Right-angle mid-mount	Without screwlock	15 μ Au &Sn	T&R	2129261-1, 2129276-1
	2129261-1	Plug	2-Row T/H, 1-Row SMT	Vertical	Cradle	15 μ Au &Sn	T&R	2129260-1/-2, 2129273-1
	2129276-1	Plug	Soldering	N/A	Cable plug	15 μ Au &Sn	Tray	2129260-1/-2, 2129273-1

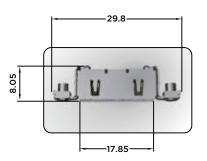
 $^{^{}st}$ Note: Each of these are 40 pos, other positions can be added later as they are tooled.

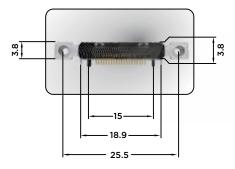


Product Sizes

P/N: **2129260-1**

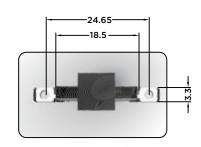
Receptacle with screwlock

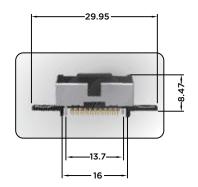




P/N: **2129261-**1

Cradle plug

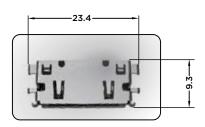


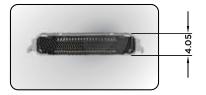


Dimensions: mm

P/N: **2129273-1**

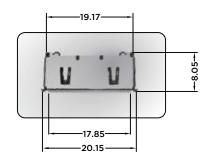
Receptacle without screwlock

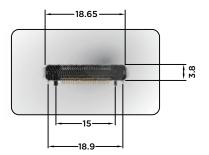




P/N: 2129260-2

Receptacle without screwlock







Frequently asked questions

Question 1

Why did TE develop a 0.6mm centerline high speed CHAMP docking connector? Is it more compatible with tablets in the market?

Answer 1

O.6mm centerline high speed CHAMP docking connectors perform better in signal transmission than similar connectors of O.5mm pitch, which ensures the differential signaling of USB 3.0, DisplayPort and HDMI standards. We also expect that more tablet PCs will be equipped with the advanced industry-standard I/Os in the near future.

Question 2

Why does the PCB layout feature one row of SMT (surface mount technology), and two rows of through-hole?

Answer 2

Dual rows of SMT soldering may make it difficult to control coplanarity. So we suggest customers use one row of SMT contact for differential signaling and two rows of through-hole for other pin assignments.

Question 3

How does TE arrange production to meet increasing market demand? Does the product reserve any IP (intellectual property) rights?

Answer 3

TE has strong production capability to serve the market. As the owner of IP rights for the product design, TE can grant licenses to qualified, reliable suppliers to increase production if necessary.

Question 4

Can TE support a customer's specific pin assignment requirements?

Answer 4

TE is renowned for its strong signal evaluation capability. We can provide engineering resources to address specific customer pin assignment requirements to satisfy a customer's needs.

Question 5

Will TE offer any other options of contact positions besides the current 40-position?

Answer 5

TE currently offers only 0.6mm centerline high speed CHAMP docking connectors in a 40-position configuration. We plan to develop 20-, 30- and 50-position connectors in the future.

FOR MORE INFORMATION

TE Technical Support Center

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*as defined www.te.com/leadfree

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