



Quick Reference Guide

USB 3.0 Interconnects

TE Connectivity, a voting member of Universal Serial Bus - Implementers Forum (USB-IF), offers a new USB 3.0 connector that retains all the great features of previous generations of USB interconnects with even better performance and power management.

TE Connectivity offers a full line of USB 3.0 product solutions, including various configurations of Standard A and B style plugs and receptacles; powered B plugs and receptacles; Micro B and AB plugs and receptacles; and cable assemblies. Various stacked and combination variations are expected to round out the TE Connectivity USB 3.0 portfolio.

FEATURES AND BENEFITS

- Supports up to 5 Gbps
- 10X faster than USB 2.0
- Optimized power efficiency
- Backward compatible with USB 2.0
- Minimized connector form factor variations

PRODUCT APPLICATIONS

- Desktop and laptop computers
- Cameras
- Digital audio
- High-volume storage devices
- High definition A/V equipment
- Keyboards/ Mice/ Joysticks

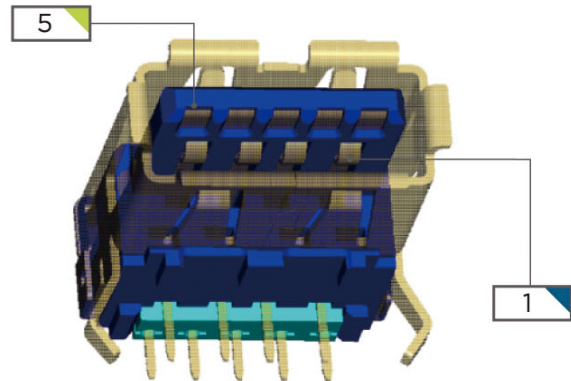
te.com/products/usb3



USB 3.0 has a 10x performance increase over USB 2.0

- Standard A Receptacle has same interface as the USB 2.0, but with added pins for SuperSpeed USB signals

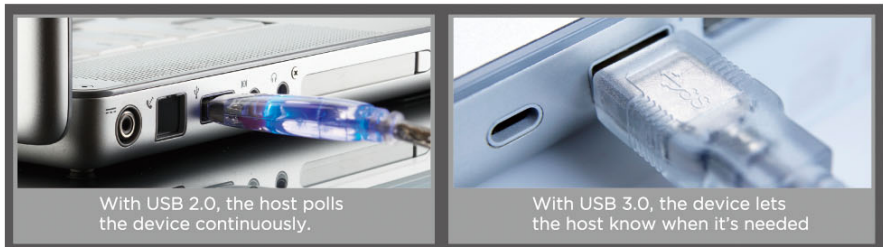
Pin #	Signal Name	Description
1	VBUS	Power
2	D-	USB 2.0 differential pair
3	D+	
4	GND	Ground for power return
5	StdA_SSRX-	SuperSpeed receiver differential pair
6	StdA_SSRX+	
7	GND_DRAIN	Ground for signal return
8	StdA_SSTX-	SuperSpeed transmitter differential pair
9	StdA_SSRX+	



Standard B connector is visually different from USB 2.0 but the receptacle accepts a USB 2.0 Standard - B plug

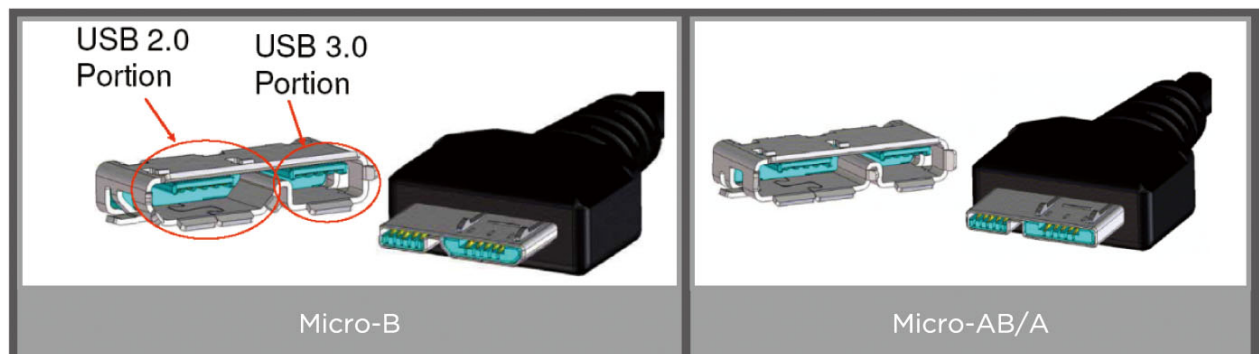
USB 3.0 has better power optimization than USB 2.0

- Up to 80% more power
- Elimination of device polling



Minimized connector form variations

- Mini and Micro consolidated into Micro USB 3.0



FULL SIZE USB 3.0 Connectors

	Base Part #	Type	Plug/Recept	Ports	TH/SMT	Orientation	Std/Rvs	Offset
	1932266	A	Plug	1	-	-	Std	-
	1932258	A	Recept	1	TH	RA	Std	-
	1932658	A	Recept	1	TH	RA	Rvs	-
	1932354	A	Recept	1	TH	RA	Rvs	CL = 1.75
	1932295	A	Recept	1	TH	RA	Rvs	CL = 0.14
	2041179	A	Recept	1	TH	RA	Std	CL = 1.04
	1932355	A	Recept	2	TH	RA	Std	-
	1932259	B	Recept	1	TH	RA	Std	-

USB 3.0 Cable Assemblies

Base Part #	Description	Color
2117154	Std A to Std B	Black
2117155	Std A to Micro B	Black
2117156	Std A Male to Std A Male	Black
2117157	Std A Male to Std A Female	Black
2117158	Std A Male to Open	Black
2117159	Micro A to Micro B	Black
2117160	Micro A to Open	Black

Frequently asked questions

Question 1:

How do I know which product is USB 3.0 compliant?

Answer 2:

Visit: <http://www.usb.org/developers/compliance>

Question 2:

How do I get the TID no. for USB 3.0 certification?

Answer 2:

Visit: <http://www.usb.org/kcompliance/view>.

Question 3:

How do I find the operating temperature range?

Answer 3:

Visit: <http://www.te.com/products/usb3>

See performance characteristics section.

Question 4:

Is a USB 3.0 receptacle capable of accepting a USB 2.0 plug?

Answer 4:

Yes, but it will run at USB 2.0 speed.

Question 5:

Are USB 2.0 products being eliminated?

Answer 5:

There is likely to be a transition to USB 3.0 but USB 2.0 will be available for the foreseeable future.

Question 6:

Is there a Mini USB available in the 3.0 spec?

Answer 6:

No. Mini and Micro are combined into Micro USB 3.0.

FOR MORE INFORMATION

TE Connectivity Technical Support Center

USA: +1 (800) 522-6752
Canada: +1 (905) 475-6222
Mexico: +52 (0) 55-1106-0800
Latin/South America: +54 (0) 11-4733-2200
Germany: +49 (0) 6251-133-1999
UK: +44 (0) 800-267666
France: +33 (0) 1-3420-8686
Netherlands: +31 (0) 73-6246-999
China: +86 (0) 400-820-6015

For other country number go to te.com/supportcenter

Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.

*as defined www.te.com/leadfree

te.com

© 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved.

6-1773457-0 CIS PDF 5/2011

USB-IF, SuperSpeed USB and SuperSpeed are trademarks of Universal Serial Bus Implementers Forum, Inc. TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks. Other logos, product and/or Company names might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

