

TUSB1044A VS PI3EQX2024 Comparison

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Part Number	TUSB1044A	PI3EQX2024
Manufacturer	Texas Instruments	DIODES
USB3.2 Gen 2X2 Compatible	Yes	Yes
Package	WQFN (40)	UQFN (34)
Package Size	6mm X 4mm	2.5mm X 4.5mm
Temp Range	0 °C to +70 °C, -40 °C to +85 °C	-40 °C to +85 °C
Supported Functionality	USB3.2 Gen 2, USB3.2 Gen2X2, DisplayPort(UHBR10)	USB3.2 Gen 2, USB3.2 Gen2X2
USB Speed	10Gbps(USB3.2 Gen2), 20Gbps (USB3.2 Gen2X2)	10Gbps(USB3.2 Gen2), 20Gbps (USB3.2 Gen2X2)
EQ Settings	15 EQ settings, up to 10.5dB @ 5GHz.	4 EQ settings, up to 14.6dB at 5GHz.
DC Gain	Yes, from 0dB to 2dB.	Yes, from -1.6dB to 2.7dB.
Linearity Range	Selectable, starting from 900mVpp to 1300mVpp	Single option of 1200mVpp
Active Power Consumption	297mW typ. (USB3.2x1) 578mW typ. (USB3.2x2)	260mW typ. No specification on what mode.
Automatic Power States	U0, U1, U2, U3. Selected automatically based on physical layer conditions.	Active Mode, Slumber Mode, Deep Slumber Mode, Unplug Mode, PD Mode based on signal detector.