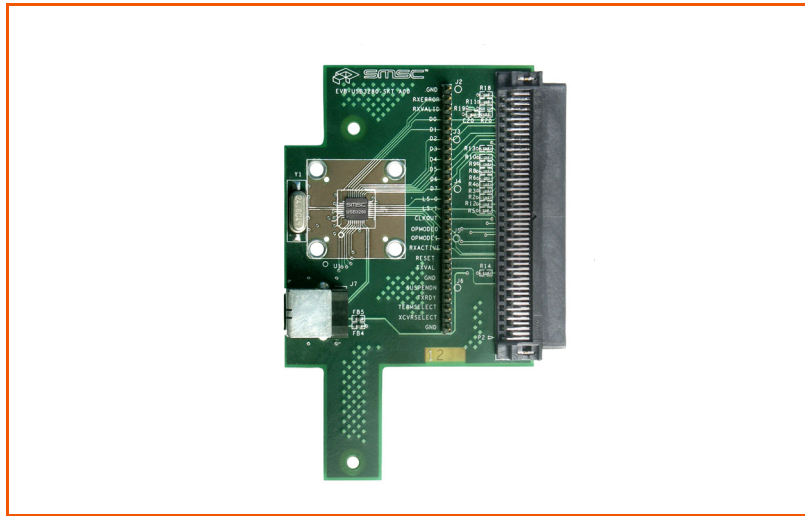


EVB-USB3280 User Manual



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1 Overview

The EVB-USB3280 is a T&MT Daughter Card that may be attached to a USB link layer system to create a USB device. The board edge connector meets the UTMI specification requirements for the T&MT connector. The EVB-USB3280 supports the 8-bit bidirectional UTMI digital interface. A link to both the UTMI specification and the T&MT specification is located in the SPECIFICATIONS section of the USB3280 web page on the SMSC web site.

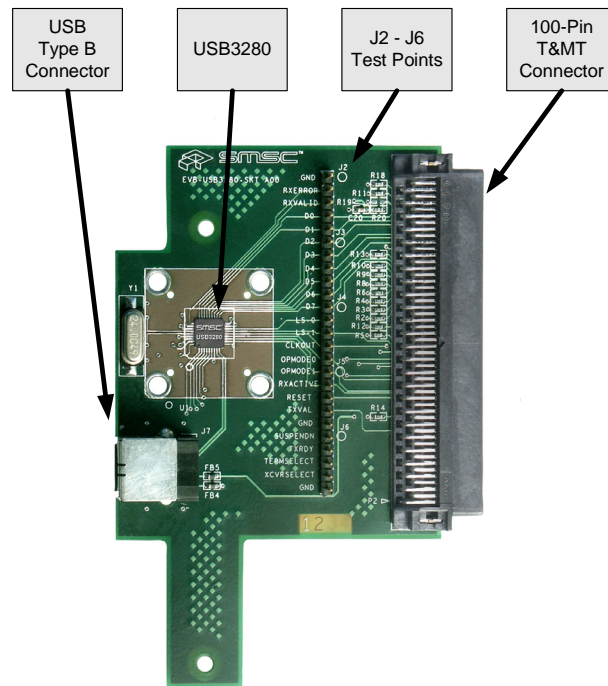


Figure 1 Top View of the EVB-USB3280

1.1 3.3 Volt Power Supply

The EVB-USB3280 requires a 3.3 volt supply capable of providing 80mA of current to be present at the T&MT connector.

1.2 Edge Connector for Digital I/O

The T&MT edge connector is compliant to the UTMI specification. The 100 pin edge connector on the EVB-USB3280 is an AMP 2-557101-5, and it mates with the AMP 2-557100-5.

1.3 Crystal Oscillator

The 24 MHz crystal is connected to the internal oscillator of the USB3280. A PLL circuit in the USB3280 generates the 60MHz CLKOUT signal used by the link layer.

1.4 USB Connector

A standard type-B connector is provided to attach to the bus.

1.5 VBUS Present Detection

The SIE must detect VBUS when the USB cable is attached. The EVB-USB3280 ships with a resistive voltage divider (R19 & R20) to divide the 5V signal to 3.3V at the T&MT connector. The resistor values may be changed to meet the voltage requirements of the SIE.

The values used in this resistive divider will determine how much VBUS current is consumed during suspend. A device must properly report this value in the descriptors.

1.6 UTMI Signal Test Points

The headers J2 through J6 provide convenient access to the UTMI signals, and each pin is labeled with a signal name as shown in [Figure 2](#).

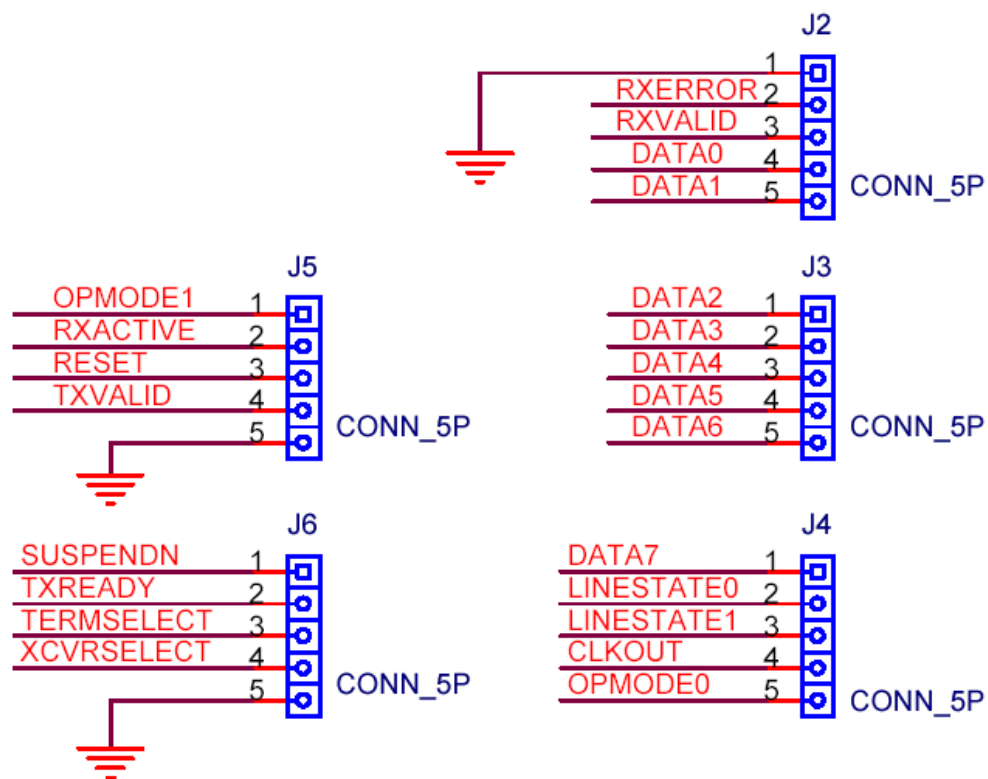


Figure 2 UTMI Signal Test Points

1.7 T&MT Connector Pinout

The T&MT specification defines the pin assignments for the T&MT connector. A link to the T&MT specification is located in the SPECIFICATIONS section of the USB3280 web page on the SMSC website. Please refer to the EVB-USB3280 schematic for information regarding which signals are used and how the signals are connected in this implementation. site.

1.8 Board Schematic

The schematic diagram is included for reference, and can be enlarged for increased readability. The schematic is also available from the SMSC web site as a separate pdf document.

