1.0   INTRODUCTION

This user's manual is for the XR17V352 evaluation board. It gives an overview of the evaluation board and the jumper settings for testing various modes using the evaluation board.

2.0   OVERVIEW

This evaluation board has a x1 PCIe connector and will work in any x1, x4 or x16 PCIe slot. The PCIe interface of the device is connected directly to the PCIe connector.

2.1   Evaluation Board Components

The table below shows all of the components that are on the evaluation board for the device.

TABLE 1: COMPONENTS OF THE XR17V352 EVALUATION BOARD

UNIT	PART	FUNCTION
U2	XR17V352IB113-F	XR17V352 PCIe UART device.
U16	SP336EEY-L	Exar RS-232/RS-485 Transceiver for UART channel 0.
U11	SP336EEY-L	Exar RS-232/RS-485 Transceiver for UART channel 1.
U7	SP336EEY-L	Exar RS-232/RS-485 Transceiver for UART RI# signals channels 0-1.
U9	SP3497EEN-L	Exar RS-485 Transceiver for UART channel 0. Not installed.
U10	SP3497EEN-L	Exar RS-485 Transceiver for UART channel 1. Not installed.
U3	HSDL2300	IR Transceiver. Not installed.
U29	SP6654EU-L	Exar 800mA buck regulator. Not installed.
U26	93C46 (PDIP)	External EEPROM for storing Vendor ID and Device ID. Not programmed.
U30	93C46 (TSSOP)	External EEPROM for storing Vendor ID and Device ID. Not installed.

2.2   Jumper Settings for Power Sources

The following table shows the jumper settings for selecting/enabling the power source for XR17V352.

TABLE 2: JUMPER SETTINGS FOR POWER SOURCES

JUMPER	FUNCTIONS	COMMENTS
J45	3.3V supply voltage for the 3.3V Core	Jumper between 1&2
J42	Enables/Disables Internal Buck Regulator	Jumper is not in - Internal buck regulator is enabled
J68	3.3V supply voltage for the output stage of buck regulator	Jumper between 1&2
J69	3.3V supply voltage for analog blocks of buck regulator	Jumper between 1&2
J70	1.2V regulated voltage from internal buck	Jumper between 1&2
J67	1.2V supply voltage for 1.2V PHY	Jumper between 2&3 to use internal buck regulator
J56	1.2V supply voltage for 1.2V Core	Jumper between 2&3 to use internal buck regulator

2.3   Jumper/Switch Settings for RS-232 or RS-485

The following table shows the setting for selecting between the RS-232 or RS-485 modes:

TABLE 3: SETTINGS FOR RS-232 OR RS-485 MODE

JUMPERS/ SWITCH	FUNCTIONS	COMMENTS
J13	3.3V Supply voltage pin for transceivers	Not installed. Trace between 1&2.
SW1	Selects between RS-232 and half-duplex RS-485 mode for UART channels 0 and 1	UART channel 0 RS-232 Mode (default) ■ 1&16 Open ■ 2&15 Open ■ 3&14 Closed ■ 4 & 13 Closed UART channel 0 half-duplex RS-485 Mode ■ 1&16 Open ■ 2&15 Closed ■ 3&14 Open ■ 4&13 Closed UART channel 1 RS-232 Mode (default) ■ 5&12 Closed ■ 6&11 Closed ■ 7&10 Open ■ 8&9 Open UART channel 1 half-duplex RS-485 Mode ■ 5&12 Closed ■ 6&11 Open ■ 7&10 Closed ■ 8&9 Open
SW2	Enables the RI# signals in RS-232 mode Enable auto RS-485 half-duplex direction control upon power-up Enable IR mode upon power-up	UART channel 0 RS-232 Mode (default) ■ 1&16 Open ■ 2&15 Open ■ 3&14 Closed ■ 4 & 13 Closed UART channel 1 RS-232 Mode (default) ■ 5&12 Closed ■ 6&11 Closed ■ 7&10 Open ■ 8&9 Open Enable auto RS-485 half-duplex direction control ■ 7&10 Closed Enable IR mode ■ 8&9 Closed
J14	Half-Duplex RS-485 control select for DE for UART channel 0 Note: SP3497E is not installed.	■ No jumper installed enables RS-485 driver ■ Jumper between 2&3 selects RTS# as the half-duplex control output ■ Jumper between 1&2 disables the RS-485 driver

TABLE 3: SETTINGS FOR RS-232 OR RS-485 MODE

JUMPERS/ SWITCH	FUNCTIONS	COMMENTS
J17	Half-Duplex RS-485 control select for RE# for UART channel 0 Note: SP3497E is not installed.	■ No jumper installed disables RS-485 receiver ■ Jumper between 1&2 enables the RS-485 receiver ■ Jumper between 2&3 selects RTS# as the half-duplex control output
J16	Half-Duplex RS-485 control select for DE for UART channel 1 Note: SP3497E is not installed.	■ No jumper installed enables RS-485 driver ■ Jumper between 2&3 selects RTS# as the half-duplex control output ■ Jumper between 1&2 disables the RS-485 driver
J19	Half-Duplex RS-485 control select for RE# for UART channel 1 Note: SP3497E is not installed.	■ No jumper installed disables RS-485 receiver ■ Jumper between 1&2 enables the RS-485 receiver ■ Jumper between 2&3 selects RTS# as the half-duplex control output

2.4 MPIO pins

The MPIO pins are connected to LEDs or test points on the evaluation board. Refer to page 6 of the evaluation board schematic for details.

3.0 DRIVERS

Software drivers for Windows (object code only) and Linux are available from Exar website. For source code, please send an e-mail with your driver request to uarttechsupport@exar.com.

NOTICE