

Rev 1.1  
 10/17/03  
 XR16L580/550 Operational Manual

This manual is for our evaluation board XR16L580/550 and ST16C580/550 that supports several types of packages. See table 1 for supported devices.

Table 1

EXAR PART	PACKAGE	LOCATION
XR16L580IL	32-pin QFN	U4
XR16L580IM	48-pin TQFP	U13
ST16C550CQ48	48-pin TQFP	U13
ST16C550IQ48	48-pin TQFP	U13
ST16C550CQ48	48-pin TQFP	U13
ST16C550IQ48	48-pin TQFP	U13

For a list of features, refer to the Data Sheet at [www.exar.com](http://www.exar.com).  
 There are several jumpers that need to be identified, please refer to Table 2.

Table 2

Jumpers	Functions	Comments
J1 1&2	IRQ3-COM2	CHANNEL A
J1 3&4 (Default)	IRQ4-COM1	CHANNEL A
J1 5&6	IRQ5-COM4	CHANNEL A
J1 7&8	IRQ7-COM3	CHANNEL A
J4-1&2	+P	UART +5V
J4-3&4 (Default)	+P	UART +3.3V
J4-5&6	+P	UART +V_EXTER (EXTERNAL POWER SUPPLY)
J5-1&2 (Default)	RXD1	Select RXD1 (wire)
J5-2&3 (optional)	IR_RX1	Select IR_RX1 (Not Installed)
J6-Open (Default)	Power Save Disable	Only XR16L580
J7- Open	I/-M	Intel/-Motorola Mode
JP1 1&2 (Default)	XTAL1	Wire
JP1 4&5 (Default)	XTAL2	Wire
JP1 3&2	External Clock	Square Wave
J10-Open	Hard Reset	UART Reset
J12-Open (optional)	IR Function	IR Direct (Not Installed)
J12-1&2 (optional)	IR Function	IR Inverted (Not Installed)
J11-Closed (Default)	Factory Test	
J8-1	TCK	JTAG CPLD
J8-2	TDI	JTAG CPLD
J8-3	TMS	JTAG CPLD
J8-4	TDO	JTAG CPLD
J8-5	+3.3V	JTAG CPLD
J8-6	Ground	JTAG CPLD

Table 2

J9-1&2 (Default)	3F8 *	Base Address Com 1
J9-3&4	2F8 *	Base Address Com 2
J9-5&6	3E8 *	Base Address Com 3
J9-7&8	2E8 *	Base Address Com 4
J13-1&2 (Default)	+VCC Max +3.3V	EIA Driver Supply (Wire)
J13-2&3 (optional)	+VCC Max +5V	
J14-1&2	Loop TXD to RXD1	Loop UART Side
J21-1&2 (Default)	+3.3V	+3.3V Latch (Wire)
J21-1&2 (Factory)	External Supply	+V_Latch
J24-1&2 (Factory)	External Supply CPLD	Not Used
J24-2&3 (Factory)	+3.3V CPLD	Trace
J32-1&2 (Factory)	External Supply UART	Not Used
J32-2&3 (Factory)	+P UART	Trace
J33-1&2	+3.3V Regulator	Trace
J33-Open	Adjustable Regulator	Not Used
J34-4&6	Max_-Force_Off	See RS-232 Data Sheet (Trace)
J34-3&5	Max_Force_On	See RS-232 Data Sheet (Trace)
J34-1&2	Select Max	Select Max (GND)
J40-Open	-Baudout	Trace Not Used
J41 1&2 (Default)	XTAL1	Wire
J41 4&5 (Default)	XTAL2	Wire
J41 3&2	External Clock	Square Wave
J100-1&2	Loop XTXD to XRXD1	EIA Loop Side
JP2-1&2	Loop XTXD1 to XRXD1	Loop RS-232 Side
JP3-1&2	Loop XTXD2 to XRXD2	Loop RS-232 Side
J16-1&2 (optional)	RXD1	RS422/485 (Not Installed)
J17-1&2 (optional)	TXD	RS422/485 (Not Installed)
J18-1&2 (optional)	-RTS	RS422/485 (Not Installed)
J18-2&3 (optional)	-RTS	RS422/485 (Not Installed)
J19-1&2 (optional)	-RTS	RS422/485 (Not Installed)
J19-2&3 (optional)	-RTS	RS422/485 (Not Installed)
J20-1&2 (optional)	Output RX	RS422/485 (Not Installed)
J20-3&4 (optional)	Output TX	RS422/485 (Not Installed)
J21-1&2 (optional)	Output RX	RS422/485 (Not Installed)
J21-3&4 (optional)	Output TX	RS422/485 (Not Installed)
J26-1&2 (optional)	TXD	IR (Not Installed)
J28-1&2 (optional)	IR_RX1	IR (Not Installed)
J27-1&2 (optional)	MD0 "1"	IR (Not Installed)
J27-2&2 (optional)	MD0 "0"	IR (Not Installed)
J29-1&2 (optional)	MD1 "1"	IR (Not Installed)
J29-2&3 (optional)	MD1 "0"	IR (Not Installed)
J30-1&2 (optional)	FIR_SEL "0" (Distance Power Select)	IR (Not Installed)
J30-2&3 (optional)	FIR_SEL "1" (Distance Power Select)	IR (Not Installed)

## Notes:

\* Select one or COM addresses for one channel of the UART.