



## TECHNICAL SPECIFICATIONS

FEATURES	FUNCTIONS
UART	QUAD 16C950 with 128-Byte transmit and receive buffers.
Baud Rate	Up to 921.6k baud RS-232 and up to 3Mbaud in differential modes with advanced-prescaler which allows a wide variety of baud rates. Option: Up to 10Mbps via custom crystal option
COM Interface	<ul style="list-style-type: none"> <li>Character length: 5, 6, 7, 8 bits</li> <li>Parity: Even, Odd, None, Mark, Space</li> <li>RS-232 Flow Control: RTS/CTS, Xon/Xoff, None</li> <li>RS-422, RS-485 Flow Control: Xon/Xoff, None</li> </ul>
ESD Protection	+/- 15KV on all signals per IEC61000
Operating Temperature	-40C to 85C Humidity 5% to 95%, Non-condensing
Storage Temperature	-65C to 150C
Power	3.3VDC; 1.6W typical
I/O Connector	Hirose DF57-6P-1.2V 6-pin, latching Mating: Hirose DF57H-6S-1.2C
Operating System	Windows and Linux Compatible
Mechanical	Size 30mm x 50.95mm Weight = 6.4 grams

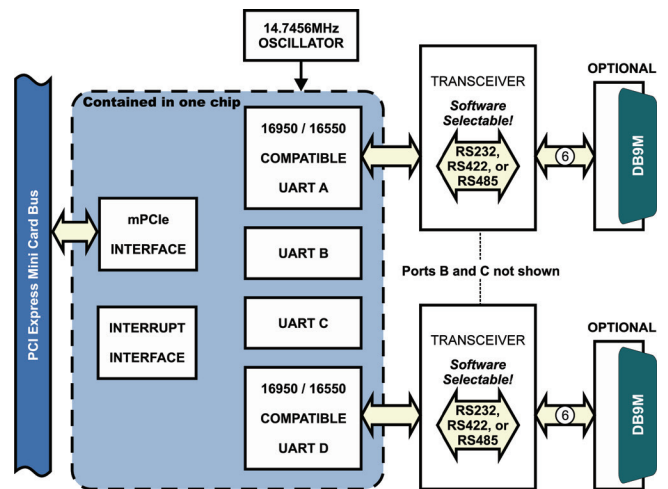
## OVERVIEW

- 2-Channel and 4-Channel Software Selectable RS-232, RS-422 or RS-485 ports
- High Performance 16C950 Serial COM Controller with 129-Byte Buffer
- Data Rate up to 921.6 Kbaud for RS-232 and up to 3 Mbaud for differential-mode RS-422 and RS-485
- Port-by-Port Field Selectable Termination for RS-422 and RS-485
- ESD Protection up to +/- 15KV
- Operating Temperature = -40C to 85C

## DESCRIPTION

The ADLCOM is available in 4-port and 2-port versions. Each port is capable of communication speeds up to 921.6kbps for RS-232 and 3Mbps for differential-mode RS-422 and RS-485. It features large 128-byte deep transmit and receive FIFOs which help protect against data loss in multitasking operating systems, reduce CPU utilization, and improve data throughput, while reducing or eliminating inter-character or inter-packet pauses.

RS-232, RS-422, or RS-485 is software selected on a per port basis. The selection is stored in non-volatile memory for future use. RS232 ports are 100% compatible with every industry-standard serial COM device, supporting TX, RX, RTS, and CTS. RS-422 mode uses the same transceivers as the RS-485 specification, allowing perfect 4-wire RS-422 and RS-485 compatibility with support for full-duplex RS-485 4-wire.





## CONNECTOR PINOUTS

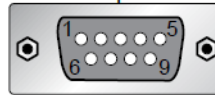
DB-9 Male Pin	232	422	485
1		Tx-	
2	RX	Tx+	
3	TX	Rx+	Rx/Tx+
4	RTS <sup>1</sup>	Rx-	Rx/Tx-
5	GND	GND	GND
6			
7	RTS	Rx- <sup>2</sup>	
8	CTS		
9			

Note 1: pin 4 and pin 7 are connected.

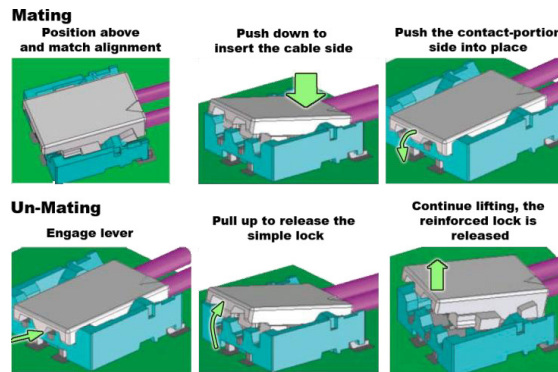
Hirose 6-pin	232	422	485
1	GND	GND	GND
2	Tx	Rx+	Rx/Tx+
3	Rx	Tx+	
4	RTS	Rx-	Rx/Tx-
5	CTS		
6		Tx-	

Signal Definitions	
Signal	Meaning
	no connect
RX	Receive Data
TX	Transmit Data
GND	Signal Ground
RTS	Request To Send
CTS	Clear To Send
Tx-	Diff. full-duplex TX -
Tx+	Diff. full-duplex TX +
Rx+	Diff. full-duplex Rx+
Rx-	Diff. full-duplex Rx-
Rx/Tx+	Diff. half-duplex +
Rx/Tx-	Diff. half-duplex -
Pin 4 and pin 7 are connected, so these signals are duplicates to be ignored.	
Rx- RTS	

DSUB 9-pin Male



## MATING CABLES TO I/O HIROSE CONNECTOR



## ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
ADLCOM-4SM	299855	4-port Software-Selectable RS-232, RS-422, RS-485 w/ DB9 Cable
ADLCOM-2SM	299855-2	2-port Software-Selectable RS-232, RS-422, RS-485 w/ DB9 Cable
Conformal Coating	807720	Conformal Coating with Acrylic Humiseal 1B31