

## **UEI Synchronous Serial Communication Boards**

The following FAQ provides an overview of UEI synchronous serial communication boards: the DNx-SL-504, DNx-CT-602-804, and DNx-SL-514.



## **Synchronous Serial Board Overview**

The SL-504, CT-602-804, and SL-514 all send and receive data as bit streams, with bit transmission and reception synchronized to a common serial clock signal.

All three boards support RS-422/RS-485 electrical standards, which specify the physical electrical specifications for signal lines, such as differential signals using twisted pair cables, voltage levels, and bit rates. The SL-504 also supports the RS-232 electrical standard.

The boards differ in the serial protocols they support. This affects whether or not the clock must be a continuous clock stream, what bit pattern signifies the start of a transmission, or what data word lengths are supported.

## SL-504, CT-602-804, and SL-514 Feature Comparison

Board Type	Electrical Standards	Serial Protocols	Subset of Features
DNx-SL-504	RS-232 RS-485/422	HDLC or SDLC (in RS-485/422 mode)	-Programmable bit rate: -RS-232 max baud rate is 230 kbaud -RS-485/422 max baud rate is 4 Mbaud -RS-485/422 full duplex support -RS-485/422 half duplex support (-801) -5,6,7 or 8 bits/word(character)
DNx-CT-602-804	RS-485/422	General purpose Synchronous Serial (GPSS) or "Clock/Data/Strobe"	-Programmable bit rate: 300 baud to 16 Mbaud (2Mbaud max sustained) -Differential, simplex (each port is only RX or TX) -Programmable word length: 3 to 32 bits -Programmable frame sync strobe (frame sync identifies valid data shifting) -Requires continuous clock signal
DNx-SL-514	RS-422	Synchronous Serial Interface (SSI)	<ul> <li>Programmable bit rate: up to 2.5 Mbaud</li> <li>Differential, simplex (each channel provides independent master port and slave port)</li> <li>Programmable word length: 3 to 32 bits</li> <li>Clock train initiates data shifting (clock will not be continuous)</li> </ul>

## For more information:

Please contact UEI support at <a href="mailto:support@ueidag.com">support@ueidag.com</a> or call 508.921.4600 with any questions.