

GENERAL DESCRIPTION

The HI-8281 device from Holt Integrated Circuits is a silicon gate CMOS device which can be used to interface directly to the ARINC 429 bus. The device is fully compliant with the ARINC 429 bus specification. This new product is the first ARINC transceiver offered in a single package that directly interfaces both the transmit and receive functions to the ARINC Bus.

Figure 1 shows a typical Avionics Box implementation and the same implementation using the new Holt HI-8281 device. In Figure 1a, the ARINC interface electronics consist of a transceiver (e.g., HI-8282) and a line driver (e.g., HI-8585). Normally a separate ARINC line driver is required to translate the CMOS output voltage levels of the transceiver logic to the required ARINC 429 levels.

An Avionics Box implemented using the new Holt HI-8281 is shown in Figure 1b. Only a single integrated circuit is necessary to interface to the ARINC 429 bus. This implementation reduces board space and overall system weight. This functionality is now available from Holt in a single, 44-pin J-Lead ceramic QUAD package. A 44-pin J-lead plastic PLCC version will be available in the 3rd quarter of 1999.

PRODUCT DATA SHEET

A complete product data sheet for the Holt HI-8281 device will be available from Holt in mid 1999. Interested parties can refer to the Holt HI-8282 data sheet for transceiver specifications and the Holt HI-8585 data sheet for the line driver specifications.

APPLICATIONS

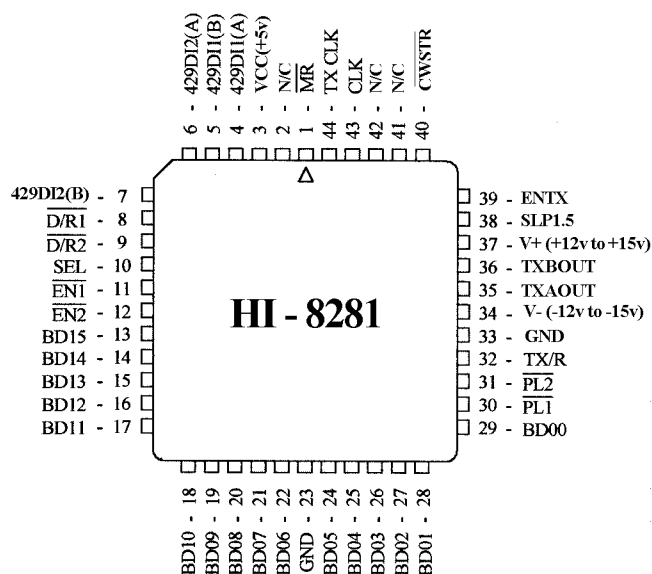
- Avionics data communication
- Serial to parallel conversion
- Parallel to serial conversion

FEATURES

- ARINC specification 429 compatible
- Direct receiver and transmitter interface to ARINC bus in a single device.
- 16-Bit parallel data bus
- Timing control 10 times the data rate
- Selectable data clocks
- Receiver error rejection per ARINC specification 429
- Automatic transmitter data timing
- Self test mode
- Parity functions
- Low power
- Industrial & full military temperature ranges

PIN CONFIGURATION (Top View)

44-PIN J-LEAD CERQUAD



HI-8281 PRODUCT ANNOUNCEMENT

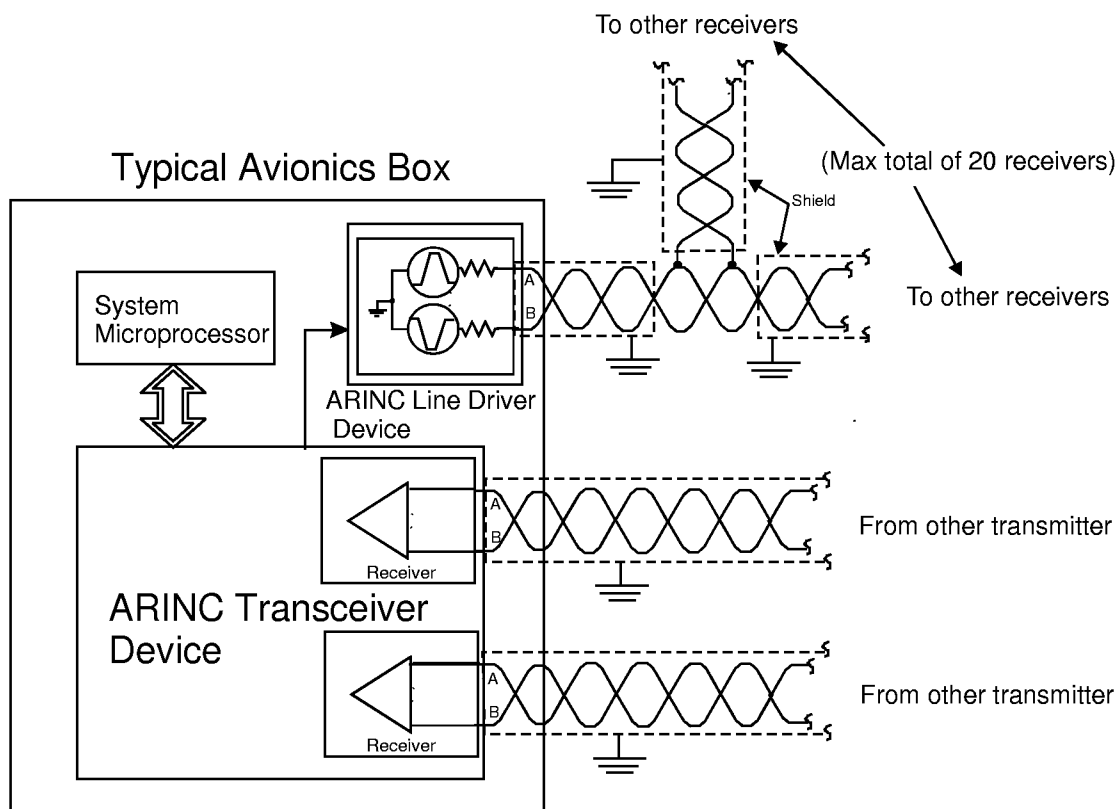


Figure 1a -- Typical Avionics Box

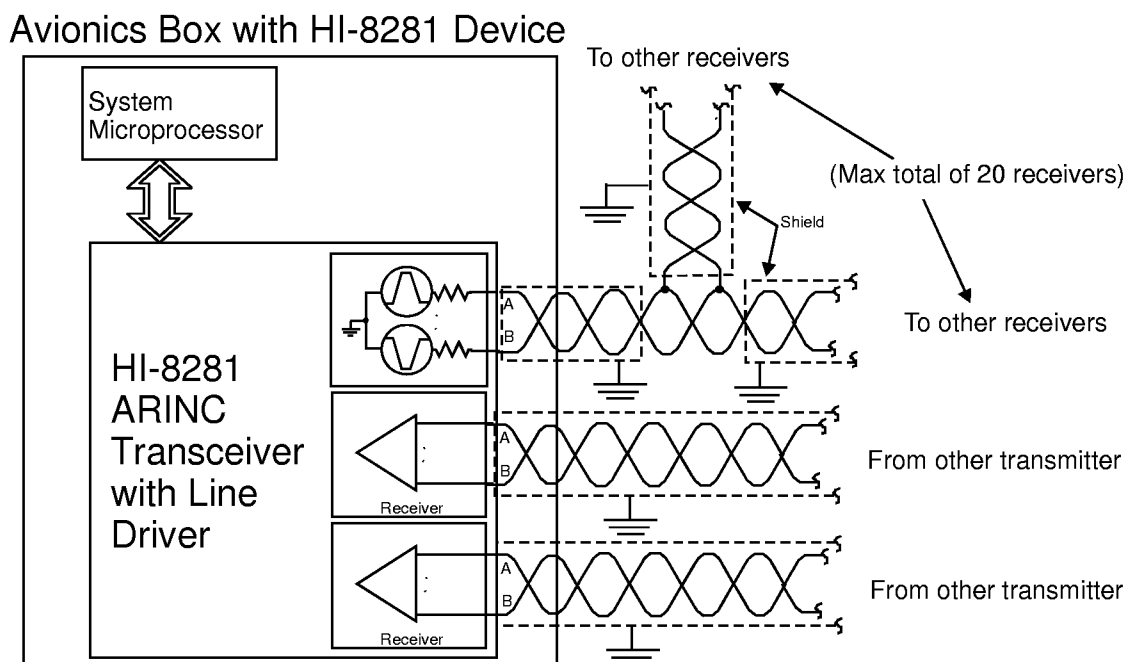


Figure 1b -- Avionics Box using the HI-8281