

# Holt Integrated Circuits

## Avionics Data Bus IC Solutions

**H**olt Integrated Circuits has provided single-chip IC data bus solutions to the avionics industry for over 15 years, supplying more than 400 manufacturers worldwide in a wide variety of applications such as flight control, navigation, engine management, communications, safety equipment and in-flight information systems.

Holt's ARINC 429 portfolio is the widest in the industry, providing a large selection of protocol ICs, line drivers, line receivers and fully integrated solutions. Holt's ARINC 429 ICs are found in almost every commercial aircraft flying today and are also deployed in numerous military helicopter programs such as the Blackhawk, Apache and Comanche. Holt also offers a range of components for MIL-STD-1553 applications, including protocol ICs, transceivers and transformers. Holt's MIL-STD-1553 products are found on programs such as F-16, Bradley Fighting Vehicle, JDAM and Airbus A350 XWB. All of Holt's products are available in industrial -40°C to +85°C or extended -55°C to +125°C temperature ranges, with optional burn-in available on many products in the extended temperature range.

### ARINC 429 Components

Holt Integrated Circuits is the leading supplier of ARINC 429 integrated circuit components worldwide. The HI-8571 and HI-8591 line driver and line receiver connect directly to the ARINC 429 bus and perfectly compliment existing FPGA or discrete protocol solutions. The HI-8571 operates solely from a +/-5V supply, whereas the HI-8591 has exceptional common mode performance in excess of +/-30V. Many customers opt for Holt's fully integrated proprietary ARINC 429 solutions, which integrate the digital ARINC 429 protocol on the same chip as the analog line driver/line receiver functions. This provides an extremely robust, reliable and compact all-in-one solution.

The HI-3582A includes two receive channels with built-in analog line receiver, one transmit channel with built-in line driver, 16 programmable label filters on each receive channel and 32-word receive and transmit FIFOs. The HI-3582A communicates with an external microprocessor via a high-speed 16-bit parallel interface. The HI-3585 has the same basic features as the HI-3582A, but can filter up to 256 labels and has the added advantage of a compact 4-pin SPI host interface. Many of Holt's ARINC 429 products provide the capability to use external resistors to allow more robust lightning protection schemes.



### MIL-STD-1553 Components

Holt supplies protocol ICs, transceivers and transformers for MIL-STD-1553 applications. The HI-1573 dual transceiver operates from a 3.3V supply and has the lowest power dissipation and smallest footprint in the industry at 7 x 7 x 1mm in a QFN package. Holt also offers the smallest footprint isolation and coupling transformer solution at 0.4 x 0.4 x 0.185-inch. The PM-DB2798S is a dual ratio device, combining both PM-DB2791S and PM-DB2795S to

allow selection of different turns ratios from the secondary winding. In addition to transceivers and transformers, the HI-6110 message processor provides a fully integrated MIL-STD-1553 solution. The HI-6110 can operate in BC/MT/RT modes and has dual transceivers integrated on the same IC, offering a reliable and compact solution.

### Quality Certifications and Customer Service

Since its inception, Holt Integrated Circuits has prided itself in superior quality and customer satisfaction and holds gold supplier ratings for quality and on-time

delivery from many customers, including the Lockheed Martin STAR Supplier award. Holt's IC solutions are all single chip, which avoid the long lead times incurred in competitor multi-chip module solutions, and maintains stock on most products. With all its testing and screening done on-site, final product is delivered directly from Holt's door to the customer. Holt also holds numerous quality certifications, namely ISO 9001:2000, PURE and STACK, with select products available to DSCC SMD specifications. PURE is an Association of European aerospace OEMs dedicated to maintaining the highest manufacturing, quality and reliability standards of plastic packages used in rugged environ-

ments. STACK Specification S/0001, (adopted by European Standards Committee as ES59002), is a strict quality policy evolved over the last three decades by STACK member companies specifically for aerospace OEMs and suppliers.

### Contact Information

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