

The **HT3012** is a single chip solution that combines the HT2012 HART® Modem core, an LCD Driver, a 15-bit D/A Converter, and a 32-bit Floating-Point Coprocessor into a single ASIC. By combining these functions in a single chip, The HT3012 results in a variety of benefits, including lower ownership and manufacturing costs, better performance, simpler design and a quicker time to market. The integrated D/A converter and Floating Point Coprocessor increase performance while simultaneously decreasing PCB area.



TECHNICAL CHARACTERISTICS

- ✓ Integrates the SRC HT2012 HART® Modem core:
 - Operates at the Bell 202 Standard Forward Bit Rate (1200 bits/second);
 - 1200 Hz and 2200 Hz Bell 202 Shift Frequencies;
 - Superior Carrier Detect;
 - Frequency Shift Keying (FSK);
 - 1200 Baud Transmit and Receive Modulation;
 - Optimized for Intrinsically Safe Application.
- ✓ LCD driver for up to a 160-segment display.
- ✓ LCD can be oriented in multiple positions with the use of automatic orientation detection and segment reorganization.
- ✓ 15-bit D/A converter with an approximate resolution of 0.5µA per bit.
- ✓ Floating-Point Coprocessor to significantly increase performance.
- ✓ Compatible with Motorola and Intel buses.
- ✓ Engineering support services available for development of software source code and PCB designs.
- ✓ Shortens development schedule.
- ✓ Reduces part count.
- ✓ Lowers ownership and manufacturing costs.

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