

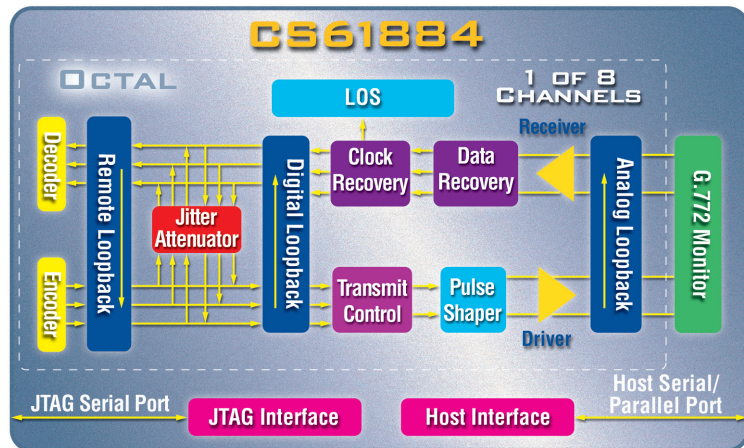
# New Universal T1/E1/J1 Octal LIU (Line Interface Unit) Industry Standard Footprint Makes It Ideal for CO Equipment

## CS61884 Features

- Octal E1/T1/J1 short-haul Line Interface Unit (LIU)
- Low power: 1.9 W (T1/J1)  
1.4 W (E1)
- No external component changes needed for 100 Ω/120 Ω/75 Ω operation
- Socket compatible with LXT384
- Pulse shapes can be customized
- Internal AMI, B8ZS, or HDB3 encoding/decoding
- LOS detection per T1.231, ITU G.775, ETSI 300-233
- G.772 non-intrusive monitoring
- G.703 BITS clock recovery
- Crystal-less jitter attenuation
- Transmitter short circuit current limiter (<50 mA)
- Serial/parallel microprocessor control interfaces
- TX drivers with fast High-Z and power down
- JTAG boundary scan compliant to IEEE 11409.1
- -40°C to +85°C industrial temperature range
- Available in 144-pin LQFP, 160 FBGA



Actual Size



CS61884 integrates eight, full-featured, short-haul Line Interface Unit (LIU) channels in an industry standard footprint and firmware compatible IC. Targeted for telecom equipment, it supports both 1.544 Mbps or 2.045 Mbps data transmission. Each channel has complete receiver and transmitter circuitry including crystal-less path-selectable jitter attenuation, full encoder/decoder circuitry, loss of signal detection, and alarm indication signal warnings. CS61884's industry standard footprint makes it ideal for all telecom protocols and applications like channel banks, broadband cross connects, digital loop carriers, SONET/SDH muxes, and clock distribution recovery.

CS61884 builds on Cirrus' patented matched impedance technology, which completely eliminates the need to change external components between 75 Ω, 100 Ω, and 120 Ω mode designs. The simplified, single circuit design greatly reduces components and the manufacturing bill of materials (BOM)—often saving \$2 per socket or up to \$20 per card. Now manufacturers can support all major international telecommunications protocol standards in one “universal” T1/E1/J1 functional line card while decreasing their materials, engineering, qualification, and procurement efforts. CS61884 saves you valuable design time, money, and board space—and, gets your product to market faster.