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FEATURES

- ❑ Broadband data acquisition card for UT80CRH196KDS development applications
 - A/D converter
 - DC to 5KHz, ± 3 Volt input range
 - 11 μ s conversion time, 14-bit resolution, ± 16 lsb full scale accuracy
- ❑ On-board 16-bit, 16MHz, MCS-96 compatible microcontroller
 - 64K bytes of user programmed PROM
 - 64K bytes of on-board SRAM with EDAC
- ❑ C language software drivers and utilities
 - Optional RS-232 de-bug monitor
- ❑ Available with 1Mbps Low Power Serial Data Bus
 - Low level C software drivers
 - 8K words of RAM
- ❑ 4 user defined variable speed serial links
 - Low level C software drivers
 - 4 @ 0 to 1Mbaud
- ❑ 1 RS-232 Debug port @ 19.2Kbaud

INTRODUCTION

The embedded controller card (ECC) is ideal for UT80CRH196KDS development applications requiring the conversion of analog signals into digital representations. Typical applications include: power system control and monitoring, sensor data collection, and position control systems. The UT131ECC card combines a wide bandwidth multiplexed data acquisition system with a 1Mbps Low Power Serial Data Bus with RS-485 transceivers for distributed data processing applications. An on-board 16-bit microcontroller manages all data acquisition and bus interface functions. The microcontroller includes an extensive suite of on-board control peripherals to implement real-time control and maintenance functions with little CPU overhead. Additionally, the microcontroller has 15 interrupt sources, built-in synchronous and asynchronous USART, pulse width modulators, and real-time controlled outputs. Additional on-board system peripherals include a bank of serial ports and user defined output discretes. The embedded controller card comes complete with C driver executives to interface with all system peripherals. C drivers for simple analog to digital conversion routines, serial communication and data transmission fit within the 64K byte instruction space. An optional RS-232 port connects the data acquisition card to a terminal to assist in system debug.

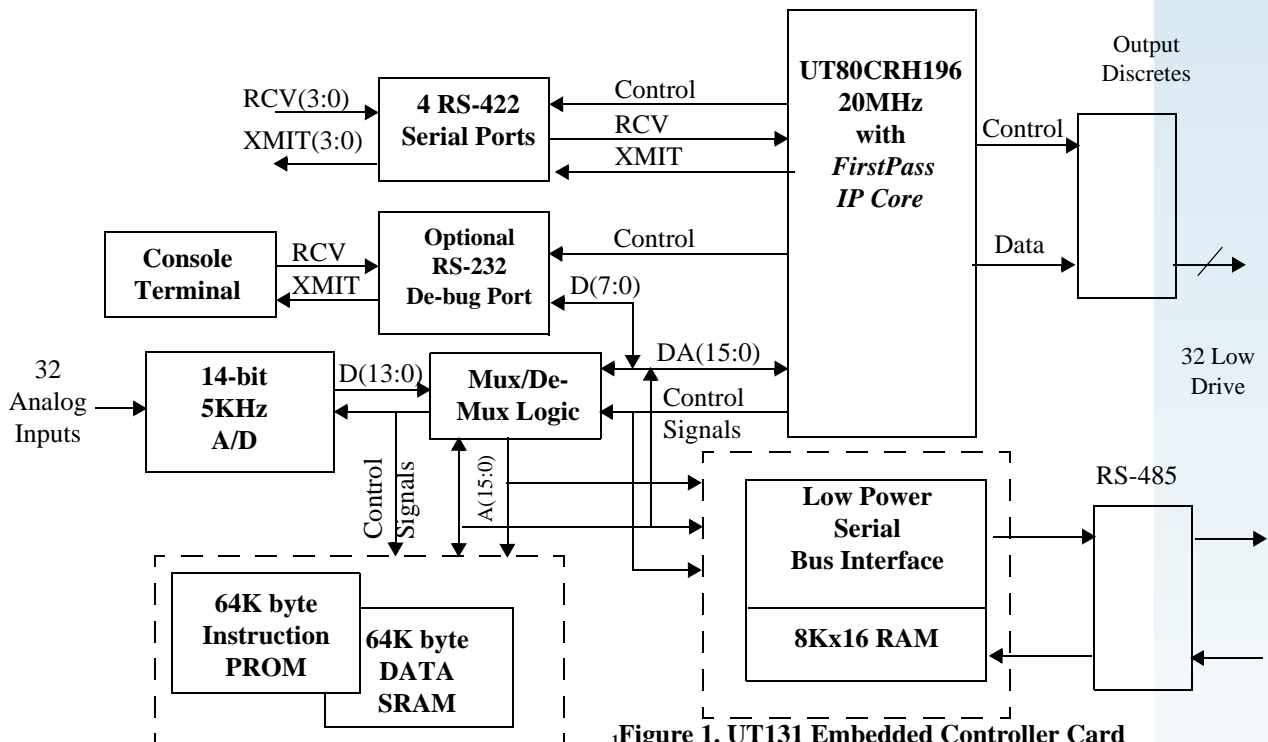


Figure 1. UT131 Embedded Controller Card

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