CANxtra™ In-Box Development System

Introduction

CANxtra™ is a highly customizable box for today's sophisticated market needs. Thanks to Embedded Master module, CANxtra executes users C# code using Microsoft's .NET Micro Framework.

Production testing, development simulation and many other cumbersome tasks are now completed in few hours with ease.

Some of the available peripherals are CAN, LIN, USB device, USB host, 100 Mbps Ethernet, Micro SD memory card, 2 UARTs, RS232 ADC, DAC and more!

What is .NET Micro Framework?

The Microsoft .NET Micro Framework extends the advantages of .NET and the Microsoft Visual Studio tools to a class of smaller, less expensive, and more resource-constrained devices than the .NET Compact Framework or the standard .NET framework.

Extended Framework Features

Embedded Master module supports a complete set of .NET Micro Framework features such as FAT, USB device and many more. In addition, it supports many other exclusive GHI features, for example, USB host, CAN, ADC, DAC...etc. With embedded master, you can access files on SD/MMC cards and USB memory devices such as Thumb Drives and Hard Disks. Also, the USB host stack can access other devices like mice , keyboards, joysticks, printers, Bluetooth dongles and more.

Key Features

- Embedded Master Module
  - .NET Micro Framework
  - 72Mhz 32-bit Processor
  - 8MB RAM
  - 4.5MB FLASH
- 128x64 16 BPP Display
- Ethernet
- USB Host
- USB Device
- RS232 with CTS/RTS support
- Additional 2 TTL UART
- RS232 with RTC, CTS
- High speed CAN transceivers up to 1 Mbps
- Secondary CAN channel without transceiver (ready for dual wire, single wire or fault tolerant transceiver)
- LIN transceiver
- Micro SD Card Connector
- 2 PWM
- 10-bit ADC and DAC pins
- Piezo
- 12 User Buttons
- 2 LEDs
- 2 PWM exposed, one
- Real Time Clock Super Cap.
- -40ºC to +85ºC Operational
- RoHS Lead Free

Connectors and Pin-out

DB25 Pin-out

No.	Name		No.		Name
1	Power		14		IO0/CAN_RD
2		RS232_TX	15		IO1CAN_TD
3	COM2	RS232_RX	16	COM1 CAN2	IO2/UART_RXD
4		RS232_RTS	17		IO3/UART_TXD
5		RS232_CTS	18		IO5/AD1
6	N/A		19		IO6/AD2/COM4_TXD
7	GND		20		N/A
8	IO12/ I2C_SDA (Open Drain)		21		IO7/AD3/AOUT/COM4_RXD
9	IO11/I2C_SCL (Open Drain)		22		IO14/PWM1
10	IO27/SPI1_SCK		23		LIN (COM3)
11	IO26		24	CAN1	DualWire Low
12	IO25/SPI1_MISO		25		DualWire High
13	IO24/SPI1_MOSI		Green LED		IO13/PWM0

CANxtra Kit Includes:

- CANxtra Box power by Embedded Master Module.
- USB Cable.
- Null Modem Cable (DB25 male - DB9 female).

51410 Milano Dr. Suite 114
Macomb Township, MI 48042
United States
PH: +1 586 693 2696
FAX: +1 586 693 3449
www.ghielectronics.com
www.canxtra.com