

Crumb128/-CAN Dongle

OEM module with USB and CAN interface for simple CAN applications (e.g. logger, sniffer, etc.).

AVAILABLE OPTIONS

Module	Processor	RAM	EEPROM	Flash	Peripherals
Crumb128-CAN Dongle	AT90CAN128	4kB SRAM	4kB EEPROM	128kB Flash	- CP2102 USB-UART converter - mini USB B 5pin connector - status LED - CAN signals on two HR30 connectors

USB INTERFACE

A USB UART converter CP2102 by Silabs is connected to the MCU's first USART RXD0/PE0 and TXD0/PE1. A standard 5pin mini USB B connector is available onboard and allows for easy connection to a host PC. The Crumb128-CAN Dongle is preconfigured such, that it is powered from USB bus. No external power supply is necessary.

CAN INTERFACE

The module is equipped with the AT90CAN128 MCU and a ISO 11898-24V standard compatible CAN transceiver, thus allowing for direct connection to a CAN bus without external components. The transceiver provides a slope resistor input to limit slew rate of the CAN signals. This input is preset low for high speed CAN interfacing.

Pinout Crumb128-CAN Dongle:

HR30-6J-6P (female receptacle)	Crumb128-CAN Dongle	HR30-6P-6S (male plug)
1	-	1
2	CAN L	2
3	-	3
4	GND	4
5	-	5
6	CAN H	6



PREINSTALLED BOOTLOADER

The module comes preloaded with the latest version of the chip45boot2 bootloader preprogrammed. It allows for flash and eeprom programming over USB without the need for an ISP adapter. The bootloader is being enabled by a certain character sequence after reset, then automatically adjusts it's baudrate to the host PC's baudrate and shows a command prompt and is ready to work. See <http://go.chip45.com/c45b2> for details on the chip45boot2 bootloader.

AUTO RESET FEATURE

Since the module comes with the chip45boot2 bootloader preloaded and this bootloader is enabled by USB USART communication after reset, the automatic reset jumper is closed, hence the PC bootloader application can connect to the bootloader automatically.

OTHER CONNECTORS AND MODULE FEATURES

The Crumb128-CAN Dongle is based on the popular Crumb128-CAN V5.0 module. If you are interested in further details on the connectors and features, please go to <http://go.chip45.com/crumb128-can-5.0> and download the Crumb128-CAN V5.0 infosheet.

DESIGN AND HANDLING GUIDELINES

This module – just like any other semiconductor devices – is susceptible to damage by ESD. Suitable precautions should be taken when handling and transporting devices. The possible damage to devices depends on the circumstances of the handling and transporting, and the nature of the device. The extent of damage can vary from immediate functional or parametric malfunction to degradation of function or performance in use over time. Devices suspected of being affected should be replaced.

SCOPE OF DELIVERY

The Crumb128-CAN Dongle comes with Hirose HR30 connectors preconnected to the CAN signals over two short (10cm) cables. The module is sealed in transparent shrinking tube and can be connected to USB through the mini

USB connector.

WHAT ELSE DO YOU NEED?

- To use the bootloader comfortably from a Windows PC application, see <http://go.chip45.com/c45b2> for the latest version of the chip45boot2 GUI application.
- A suitable mini-USB cable can be ordered here: <http://go.chip45.com/KAB-USB-A-miniB-1.5>

Declaration of Electro Magnetic Conformity of the CHIP45 „Crumb128-CAN Dongle“



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CONTACT INFORMATION

Address: chip45 GmbH & Co. KG
Am Pfad 8
D-35440 Linden
Germany

Ordering Information: +49 (6403) 9253-53
info@chip45.com

Technical Support: +49 (6403) 9253-53
support@chip45.com

Fax: +49 (6403) 9253-50

Web Site: <http://www.chip45.com>