

CAN Newsletter Online

SINGLE BOARD COMPUTER

SBC with over 150 add-ons

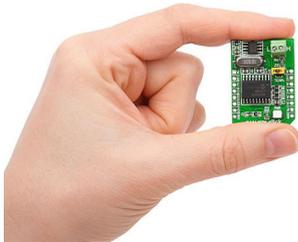
Solid Run (Israel) and Mikro Elektronika (Serbia) have jointly announced the Humming Board Gate: an SBC platform with over 150 IoT add-ons. It offers a variety of interfaces targeting makers and professionals, among them CAN.

SIZED AT 102 MM x 69 MM, THE SINGLE board computer (SBC) is the new member of Solid Run's Humming Board family, providing a choice of processing power, memory and storage, imaging sensor connectivity, Wireless/RF connectivity, and a range of I/Os, all powered by a variety of Linux distributions.

It is the first application processor board to include an integrated Mikro Bus socket offering connectivity to Mikro Elektronika's range of click add-on boards. The Mikro Bus standard defines mainboard sockets and add-on boards used for interfacing micro-controllers or microprocessors (mainboards) with integrated circuits and modules (add-on boards). The purpose of Mikro Bus is to enable hardware expandability with a large number of standardized add-on boards, each one carrying a single sensor, transceiver, display, encoder, motor driver, connection port, or any other electronic module or integrated circuit.



The Humming Board with its possible add-ons (Photo: Solid Run)



The CAN SPI click 5 V connects via Mikro Bus (Photo: Mikro Elektronika)

The range of add-on boards includes two CAN boards: the

CAN SPI click 5 V and the CAN SPI 3,3 V. The CAN SPI click 5 V is an accessory board in Mikro Bus form factor. It is a solution to add CAN connectivity to micro-controllers with an SPI interface. The board features an MCP2551 CAN transceiver circuit, which provides CAN serial communication in accordance with ISO 11898. It is designed for operation in especially harsh environments. These devices feature cross-wire protection, loss-of-ground and overvoltage protection, overtemperature protection, as well as wide common-mode range. The board is designed to use a 5-V power supply only. The CAN SPI click 3,3 V has an SN65HVD230 CAN transceiver circuit, which provides CAN serial communication. The board is designed to use a 3,3-V power supply only.

From pushbuttons to GPS and accelerometer modules, more than 150 click boards are available, with new ones being released weekly. Professional engineers and makers alike can expand the functionality of the Humming Board with all kinds of sensors, transceivers, displays, encoders, motor drivers etc.

“Our focus was to offer a powerful low cost IoT Gateway platform that can easily collect, process and connect to the cloud”, stated Rabeeh Khoury, Solid Run's CTO. “The Humming Board Gate sets a new level of development flexibility by providing endless I/O connectivity, scalable processing power and ability to run IoT middlewares such as Node-RED, MQTT broker, openHAB, and others.”

“We're excited to see click boards making their way to platforms with powerful application processors, like the Humming Board is. This will unlock an entirely new potential for developers coming up with new solutions for the emerging IoT world”, said Aleksandar Nikolic, Product Manager at Mikro Elektronika.