

FEEU ClickBeetle[®] - Reference Platform

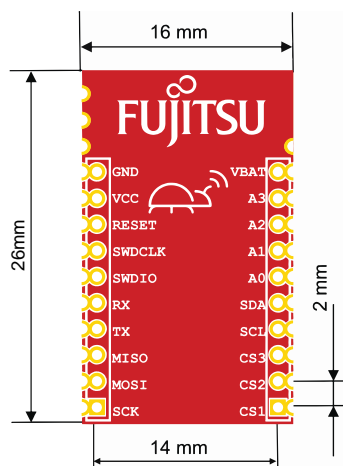


The ClickBeetle concept offers a versatile modular approach for fast application and prototype development in an unprecedented small form factor. By combining boards from the ClickBeetle family your pre-prototype reference board is instantly ready. Additional customized extensions board can be provided in less than 4 weeks.

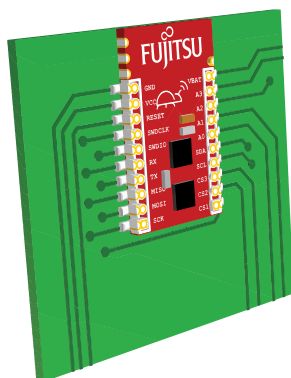
Select your RF protocol by choosing the suitable ClickBeetle for your application. Add a PowerBeetle battery board with USB charger and you are ready to go with FEEU's adapted SDK. If you need additional peripherals (e.g. memory, sensors, RTC, HMI, ...) FEEU can help you to building a custom ClickBeetle extension board featuring the missing hardware for your application prototype.

ClickBeetle[®] Standard

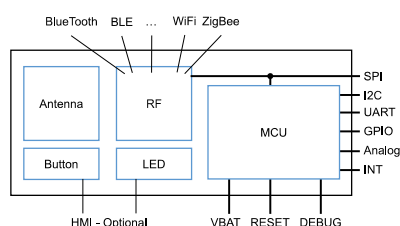
The ClickBeetle reference platform defines a new standard for connecting small form factor evaluation modules together and is bringing evaluation platforms in an end-product's shape. The platform connects to the outside by 2mm pitch through holes or surface mount half-vias. The PCB itself is just 26mm x 16mm.



Pin	Function	Description	Pin	Function	Description
1	GND	Ground	20	VBAT	Supply Voltage Battery
2	VCC	Supply Voltage 3.3V	19	A3	Analog or GPIO / INT1
3	RESET	Reset	18	A2	Analog or GPIO / INT0
4	SWDCLK	Serial Wire Debug Clock	17	A1	Analog or GPIO / PWM1
5	SWDIO	Serial Wire Debug Data	16	A0	Analog or GPIO / PWM0
6	RX	UART RX / SPI CS5	15	SDA	I2C SDA
7	TX	UART TX / SPI CS4	14	SCL	I2C SCL
8	MISO	SPI MISO	13	CS3	SPI CS3
9	MOSI	SPI MOSI	12	CS2	SPI CS2 / UART TX
10	SCK	SPI SCK	11	CS1	SPI CS1 / UART RX



ClickBeetle evaluation boards are connecting flexible to an application PCB. ClickBeetles can be mounted by surface (SMD, only one-side assembled ClickBeetles) or by 2mm pitch through hole pin-headers (THD).

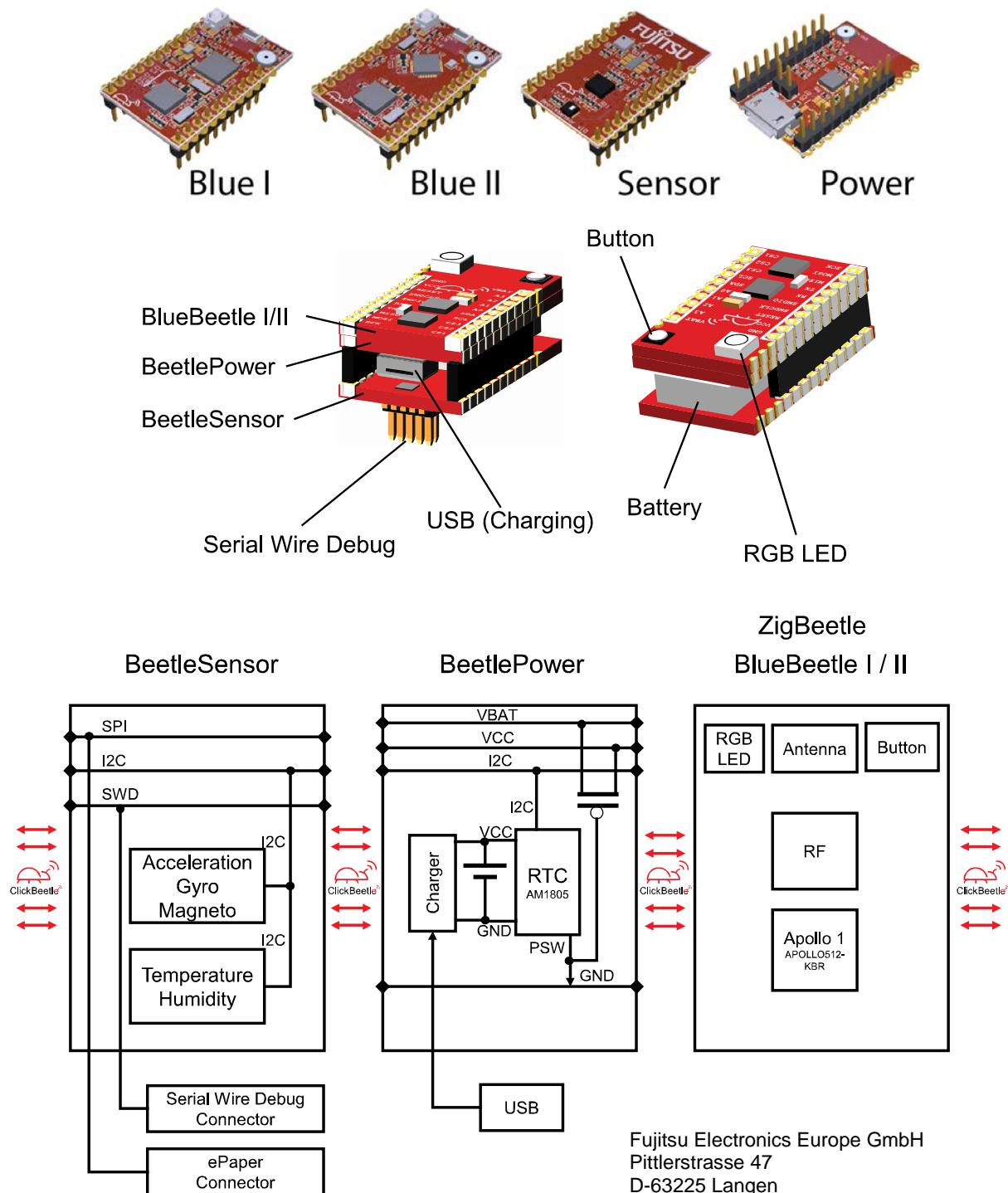


ClickBeetle's brain includes GPIOs, analog pins, serial interfaces like UART, SPI and I2C, PWM, system pins like SWD and reset, power pins and an always-on VBAT pin.

RFs like Bluetooth, BLE, WiFi and ZigBee helping ClickBeetle to connect wireless to the outside.

Click Beetle[®] Demo Platform

Currently BlueBeetle I and BlueBeetle II are building the brains of the ClickBeetle reference platform with BLE wireless connection. Different versions with ZigBee, Wifi and Bluetooth are coming up soon. To build-up a complete demo platform, BeetleSensor is adding sensors for temperature, humidity, acceleration, magnetic field and rotation, while BeetlePower is adding PMIC features with Ambiq Micros RTC with power management and a battery charger via USB.



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