EM7180DVK Development Tools for the EM7180SFP Module

The development tools available for the EM7180SFP module are based on
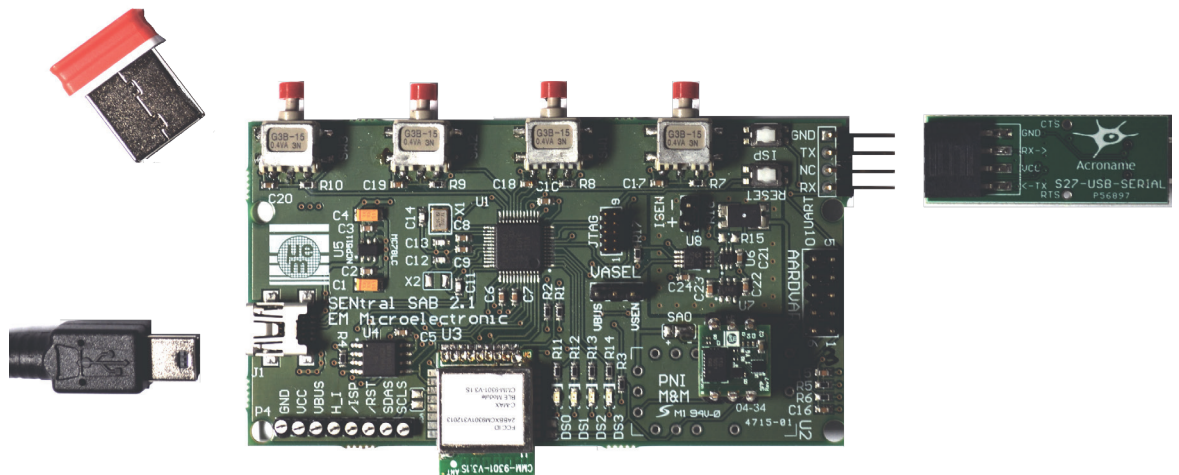
- A development kit EM7180DVK
- A software package (Host Application ToolKit and EM Monitor Graphical User Interface)

EM7180DVK hardware kit

TThe EM7180DVK is the perfect development tool used for the evaluation and prototyping of Sensor Fusion Platform module (SFP) solutions. The EM7180DVK consists of a flexible Standard Application Board Rev 2 (SABv2) featuring a Sensor Fusion Platform module, Bluetooth Low Energy (BLE) module and an ARM Cortex M3 host processor. This hardware platform, combined with example firmware applications, gives developers a head-start on product development.

Main Features

| EM7180SFP (Motion Coprocessor, EEPROM and 9 axis sensor)

| Cortex M3 ARM processor

| Bluetooth Low Energy HCI module

| DataFlash chip for holding a small PC-accessible file system shared with the ARM (acts as a USB thumb drive)

| USB connector

| Serial communication port with USB Serial Converter to connect the port to the PC terminal emulator

| High resolution current measurement circuit (for evaluating power consumption by the SFP)

EM MICROELECTRONIC

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FACT SHEET | EM7180SFP
Subject to change without notice
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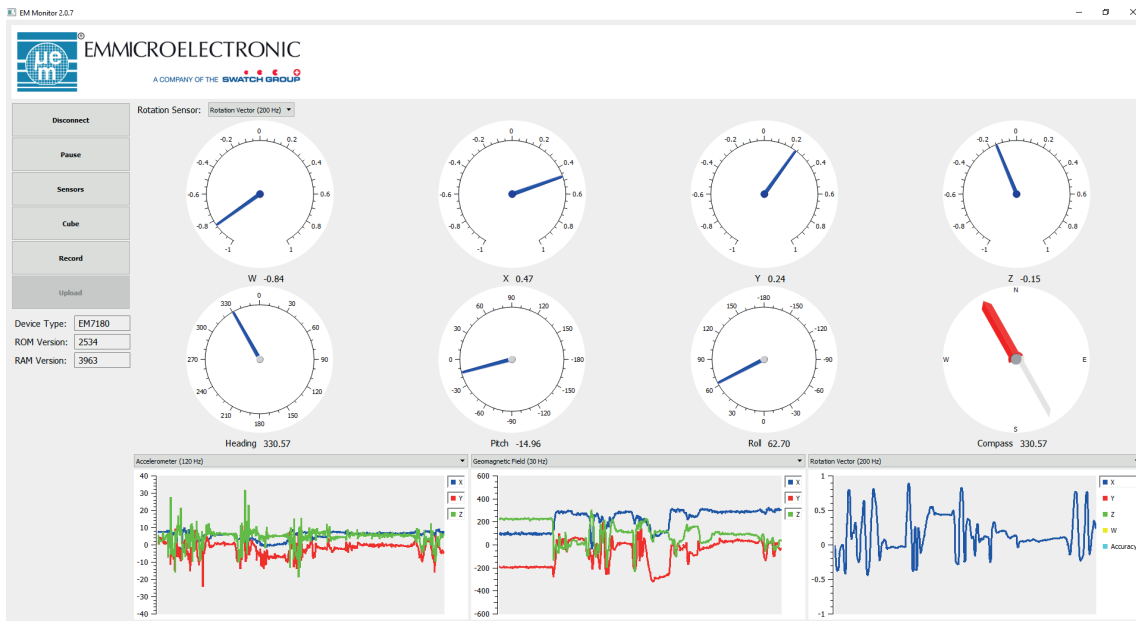www.emmicroelectronic.com

Host Application Toolkit and EM Monitor software

The Host Application Toolkit (HAT) is the API developed for the EM7180SFP. It gives all the needed entry points and services. HAT also offers some very usefull command lines utilities. Multiple applications and demos running on the NXP Cortex M3 ARM processor are also delivered (e.g: A BLE and USB Mouse based on EM7180SFP Sensors, an I2CHID driver able to communicate over the I2C with special applications using HAT, ...). The EMMonitor GUI program, interfaces with the EM7180SFP and displays quaternion, orientation (heading / pitch / roll) values and data sensor graphs over time. This program can connect to the EM7180SFP using the I2CHID interface.

Software Main Features

l Host Application Toolkit API

l Command line utilities

l Support for EM7180SFP I2C access

l Graphical User Interface

l Monitoring and measurement tools

l Various application and demos

l 3D-cube demo

Ordering

Product	Part Number	Ordering Number
Development kit	EM7180DVK	SV-1300