

MFAM Development Kit DevKit



The Geometrics MFAM Development Kit (DevKit) is a versatile and easy-to-use development platform that allows system developers to quickly design custom application interfaces using the MFAM magnetometer sensor.

The MFAM Development Kit highlights the Texas Instruments TM4C1294NCPDT Arm Cortex-M micro-controller at its core. The controller supports many different communication protocols for easy conversion of the MFAM magnetometer data into a variety of output protocols.

Supported communication channels include:

- 10/100 Ethernet MAC and PHY
- Wi-Fi through TI CC3100 BoosterPack

The MFAM Development Kit module comes complete schematics and example source code demonstrating MFAM data readout over SPI bus and communication using Ethernet output. The code can be compiled and loaded into the evaluation board using Texas Instrument's Code Composer Studio development suite (free from T.I.) using a built-in USB XDS110 debug port. In addition, there is a vast suite of libraries and code examples from Texas Instruments for the TM4C1294NCPDT Arm processor, along with a Real-Time Operating System (RTOS). The libraries, code examples, and RTOS are available for free from Texas Instruments.

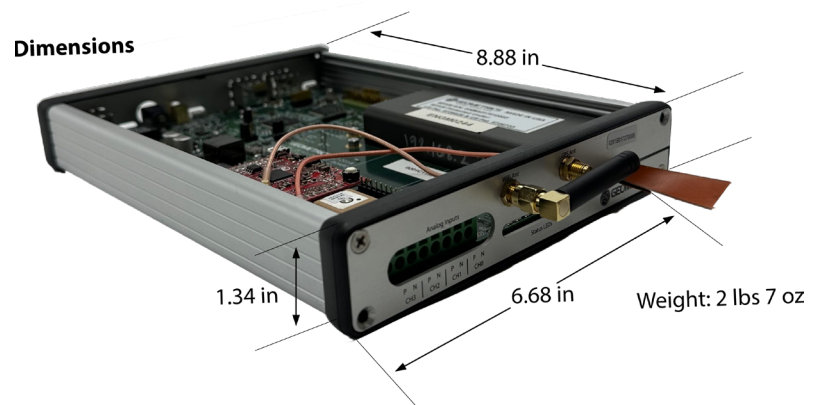


FEATURES & BENEFITS

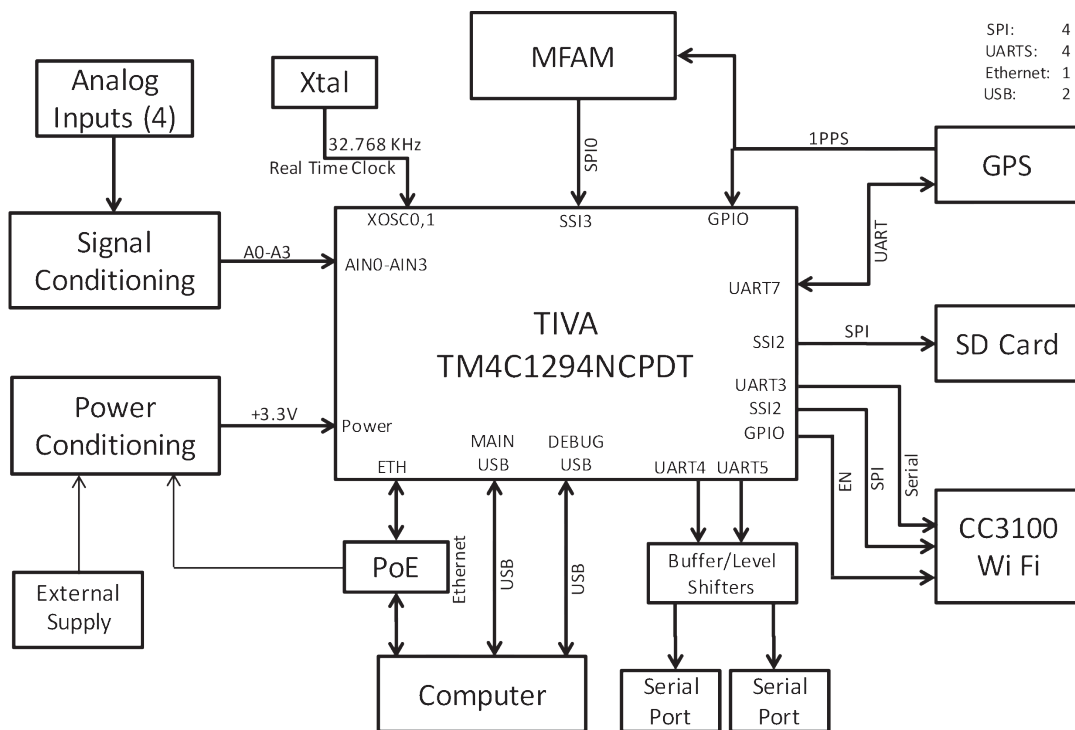
- **Four Analog Input Channels** – Differential and scalable inputs for versatile integration.
- **Power over Ethernet (PoE) Support** – Single connection for power and downloading data.
- **On-board GPS** – GPS provides position and 1PPS controls measurement timing.
- **10 MHz Reference Input** – Allows the disciplining of master system clock
- **Schematics and Example Source Code Provided** – Modify code as needed for interface requirements and use schematics to start a custom board layout.



Using the provided example source code as a starting point, the code can be modified as needed for the end user's interface requirements. After the application interface is working, and using the provided Evaluation board schematics, a custom schematic and board layout can be started. Simply jettison all the hardware not used from the Evaluation board schematic.



BLOCK DIAGRAM



Specifications subject to change without notice.

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