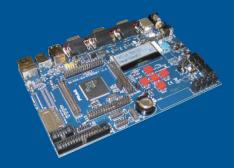
Cypress FM4 Family of MCUs Development Starter Kit SK-FM4-216-ETHERNET



Cypress FM4 Starter Kit

DESCRIPTION

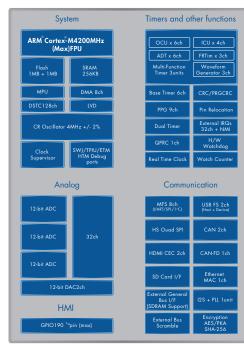
The Cypress FM4 starter kit, SK-FM4-216-ETHERNET, is equipped with everything you need to evaluate this general-purpose microcontroller. This board contains a selection of typical external components to easily test the S6E2CC's advanced internal peripheral functions. All pins are accessible through pin headers enabling custom hardware, such as sensors and motors, to be connected easily.

ABOUT CYPRESS'S FM4 MCU FAMILY - S6E2CC SERIES

The S6E2CC series, based on the ARM® Cortex®- M4F core, boasts a 200 MHz operating frequency and supports a diverse set of on-chip peripherals for enhanced human-machine interfaces (HMIs) and machine-to-machine (M2M) communication. The architecture is optimized for very high performance allowing efficient data movement with a 16kB flash accelerator enabling zero wait state execution. Peripheral-to-RAM and RAM-to-peripheral data movement is possible without CPU intervention by either an 8-channel DMA or the unique and powerful descriptor system data transfer controller (DSTC). In addition, this series supports up to 2MB flash and 256KB SRAM memory, more than a dozen different communication and memory interfaces and motor control functionality.

The rich set of peripherals and large memory of this series, allows single-chip solutions for a wide variety of applications requiring advanced, highspeed computing performance including wireless communication hubs with special accommodation for over-the-air (OTA) programming, factory automation, industrial Internet of Things (IoT), motor control, office automation, building management systems, smart meters, digital cameras and multi-function printers.

S6E2CCAL0AGL20000 BLOCK DIAGRAM



KEY FEATURES

- Monitoring all pins: 216 pins
- IEEE802.3 Ethernet RJ45
- USB Type-A, Type-B connector
- CAN transceiver, CAN-FD transceiver
- SDIF (SD card Interface)
- On board ICE (CMSIS-DAP)
- Flash memory S25FL164K (via Quad SPI)
- I2S audio interface
- Motor control interface
- Multi function serial interface
- LCD module
- TFT display interface
- Potentiometer (via A/D Converter)
- Push buttons (via GPIO)
- Reset button
- User setting jumpers
- JTAG-ICE, ETM Trace connecter
- USB bus power, USB-device bus power, JTAG, external power supply (9V-24V)

PACKAGE CONTENTS

HARDWARE

• SK-FM4-216-ETHERNET (starter kit board)

FIRMWARE

- s6e2cc_template
- s6e2cc_pdl
- sw-examples
- USB Virtual–COM port

DOCUMENTS & TOOLS

- Flash USB Direct Programmer
- Schematic file
- ReadMe_SK-FM4-216-ETHERNET
- Serial Port Viewer

USB DIRECT Programmer

U FLASH USB DIRE	CT Programmer				
SELECT Target MCU SEE2OCAH0A/J0A/L0A Hex File Open COM (1-255) 1 -Command to COM256-			FLASH INFORM Start Addr 00000000H 00400000H 0040200CH 00404000H 00406000H	ATION End Addr 001FFFFFH 00400001H 0040200FH 0040400FH 0040FFFFH	Size 00200000H 0000002H 00000004H 00000010H 00000000H
	Full Operatio	Set Environm	ment	Help	
Download	Erase	Blank Check	Check SU	M	ersion Info
Program & Verify	Read & Compare	Сору		IRECT rammer	Virtual COM

Program the Flash through USB I/F

Development workspace

Peripheral Driver Library



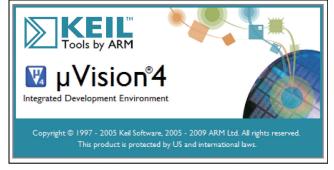
Display test result through UART

DEVELOPMENT ENVIRONMENT

All sample and peripheral driver library code is developed under IAR Embedded Workbench and KEIL µVision.

the mile died workbeschill is fick Box Boxet Jack				1338222	
Correct 1	5k- 5WG+0	24 4 1	5 7 13 0 er el le	1 4 4 8 8 8 8	
Soge Warspoce Close warspoce	to object Bar STE UT	5344T1-	h. C. A.	สโรรสโสโซสโรรสโสโซสโร	. A. C.
sins sinterio Storige a Storige a					
Page Solya					
Recent Blos			ort information, and oph		
£34.			222		
	CETTER STATED Guideling to Soling an your project address the assessing, two og and accurging it	Utilit Cutores Consider or "Or formatilitor or "Or format glass you all the unit and information or and information information you have.	EXAMPLE PROJECTS Example conflictions that demonstrate hards are peripherals for secold steviors and evaluation stands.	IN TEGRATED RTOdex Information concerns no consultation concerns for insegnated RTOD num concernsease settations	
	TITOTAL S Tritoth to evalue sha American with the EDE and the Malanas Pro- totil C.S.BPY seebagger	Support Responsibilities and the support Art product matering a became of response	ERRATE HOTES Actor and the send hadres for denigs hadres for denigs hadres for denigs in manifesen noor	By Proper By Proper Hotor years and enveloped memory and another memory and teachers induction of the Andrea	

IAR site: http://www.iar.com/



KEIL site: http://www.arm.com/

Web

Detailed Cypress FM4 evaluation board (SK-FM4-216-Ethernet) starter kit information is available at: URL : http://www.cypress.com/ARMStarterKits

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134 phone +1 408.943.2600 fax +1 408.943.6848 toll free +1 800.858.1810 (U.S. only) Press "1" to reach your local sales representative

