

**Smart Grid Infrastructure Evaluation Module (SGI EVM) Status: ACTIVE**
**TMDSSGI-EVML138**

[Description/Features](#)     [Technical Documents](#)     [Support & Community](#)     [Order Now](#)  
**Key Document**

 **[Smart Grid Solutions Brochure \(Rev. G\)](#)** (PDF 1390 KB)  
 19 Jan 2012   7,093views

[View all technical documents](#) (7)

**Description**

Smart Grid Infrastructure (SGI) Evaluation Module is based on OMAPL138/AM1808 as the main processor and has interface capability with C2000 PLC and Low Power RF modules which are sold separately. This evaluation module is a development platform for smart grid infrastructure applications including data concentrator, power analytics, quality monitoring, circuit breakers, power protection, substation and power automation.

**Features**

Three-phase power system: Three current and voltage inputs plus neutral  
 Isolation to prevent damage from high voltages and currents  
 OMAP™-L138 processor: Integra™ DSP + ARM® for control, communications and signal processing. Full Linux® BSP supported by TI  
 High-performance AIC provides 16-bit sampling at low SNR  
 Supports control and data communications: Ethernet, PLC, <1-GHz RF, RS232, CAN  
 Designed with best practices for high-speed systems: Good reference design for passing ESD system tests

**What's Included**

Ethernet Cable  
[Evaluation Board](#)  
 Power Supply  
 Power Supply Cable  
 SD Card (EVM Demo)  
 Serial port cable



TMDSSGI-EVML138 board

**Order Now**

| Part Number                                                                       | Texas Instruments | Status | Price (US\$) | Host | OS                                     | Current Version | Version Date |
|-----------------------------------------------------------------------------------|-------------------|--------|--------------|------|----------------------------------------|-----------------|--------------|
| <b>TMDSSGI-EVML138:<br/>Smart Grid Infrastructure Evaluation Module (SGI EVM)</b> | <b>TI eStore</b>  | ACTIVE |              | PC   | Linux, Microsoft Windows XP, Vista & 7 | v1.0            | 24 NOV 2011  |

**Technical Documents**
**TI Wikis (4)**

| Title                                                                                                         | Date        |
|---------------------------------------------------------------------------------------------------------------|-------------|
| <a href="#">Integra Processors Wiki -- In-depth technical and "how-to" articles, FAQs, etc.</a>               | 24 Mar 2011 |
| <a href="#">Development Tools, Operating Systems and Embedded Software Wikis - for TI Embedded Processors</a> | 08 Aug 2011 |
| <a href="#">Building Linux kernel for SGI EVM</a>                                                             | 17 Nov 2011 |
| <a href="#">SGI EVM Hardware Manual</a>                                                                       | 17 Nov 2011 |

**More Literature (3)**

| Title                                                  | Abstract | Type | Size (KB) | Date        | Views | TI Recommends |
|--------------------------------------------------------|----------|------|-----------|-------------|-------|---------------|
| <a href="#">Smart Grid Solutions Brochure (Rev. G)</a> | PDF      |      | 1390      | 19 Jan 2012 | 7,093 |               |
| <a href="#">Smart Grid Tools</a>                       | PDF      |      | 942       | 17 Jan 2012 | 393   |               |
| <a href="#">TI Data Concentrator Solution (Rev. A)</a> | PDF      |      | 1131      | 11 Nov 2011 | 1,778 |               |

**Related Products**

[SGI EVM Development Package \(v2.0 for TMDSSGI-EVML138\) – Linux Installer](#) (zip 175055 KB)  
30 Jan 2012 1 view

[SGI EVM Development Package \(v2.0 for TMDSSGI-EVML138\) – Windows Installer](#) (zip 175156 KB)  
30 Jan 2012 1 view

| Part Number                                                                                                                                                         | Name                                                                                                                                                                | Product Family                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |   |   |
| <a href="#">AM1808</a>                                                                                                                                              | Sitara ARM Microprocessor (MPU)                                                                                                                                     | Sitara ARM Cortex-A8 and ARM9 Microprocessors                                                                                                                       |
| <a href="#">OMAP-L138</a>                                                                                                                                           | C6-Integra DSP+ARM Processor                                                                                                                                        | C6-Integra DSP+ARM Processor                                                                                                                                        |

Support and Community

Blogs

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Develop on the next generation MSP430 for single-phase metering applications</b><br>The MSP430F673x/F672x series is the first MSP430 SoC to target utility metering with a 24-bit Sigma-delta converter, industry's largest 320-segment LCD controller and battery backup system. Did we say industry's largest segmented LCD controller...<br>Posted to <a href="#">Smart Grid Blog</a> on 25 Jan 2012<br><a href="#">smart grid</a> , <a href="#">microcontroller</a> , <a href="#">MSP430</a> , <a href="#">MCU</a> , <a href="#">microcontrollers</a> , <a href="#">430</a> , <a href="#">Software</a> , <a href="#">development tools</a> , <a href="#">single-phase</a> , <a href="#">MSP 430</a>          |
| <b>Develop on the next generation MSP430 for single-phase metering applications</b><br>The MSP430F673x/F672x series is the first MSP430 SoC to target utility metering with a 24-bit Sigma-delta converter, industry's largest 320-segment LCD controller and battery backup system. Did we say industry's largest segmented LCD controller...<br>Posted to <a href="#">The Official MSP430 Blog</a> on 24 Jan 2012<br><a href="#">MCU</a> , <a href="#">Microcontroller</a> , <a href="#">MSP430</a> , <a href="#">MSP 430</a> , <a href="#">430</a> , <a href="#">Software</a> , <a href="#">development tools</a> , <a href="#">microcontrollers</a> , <a href="#">smart grid</a> , <a href="#">single-phase</a> |
| <b>C3P-Ho-Ho-Ho: MSP430 powers a holiday sound and light show</b><br>Check out this post from our friends over at hackaday.com. It seems Zach, a Hackaday hobbyist and MSP430 fan, figured out a way to program an MSP430 to operate the lights on his Christmas tree in response to the notes of the "Star Wars Main Theme"...<br>Posted to <a href="#">The Official MSP430 Blog</a> on 22 Dec 2011<br><a href="#">MSP430</a> , <a href="#">development tools</a> , <a href="#">msp430f2012</a>                                                                                                                                                                                                                    |

[See more blogs](#)

Customer Tags 

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