

Quick Start

The basic procedures required to power on CEM841:

- (1). Require +12V DC power at minimum 2.5A. Make sure the power is OFF before connecting the CEM841.
- (2). Check to ensure the onboard switch SW1-1 is set to default (OFF position).
- (3). Firmly install DDR3L SO-DIMM into DIMM2 (for single memory channel configuration) or both DIMM2 and DIMM1 (for dual memory channel configuration, make sure both memory modules are of the same size, chip width, density and rank) until fully seated.

Note: It must be DDR3L memory module.

- (4). Attach heatsink to the CEM841, refer to section Installing Heatsink.
- (5). Install the CEM841 onto COM Express™ baseboard, for example, CEB94000 baseboard.
- (6). Properly install all necessary peripheral devices such as hard disk, display, keyboard and etc. to the baseboard.
- (7). Firmly attach power supply to baseboard's power connector.
- (8). Turn on the system power.
- (9). Press power button on the baseboard to start CEM841.

CEM841 Quick Installation Guide

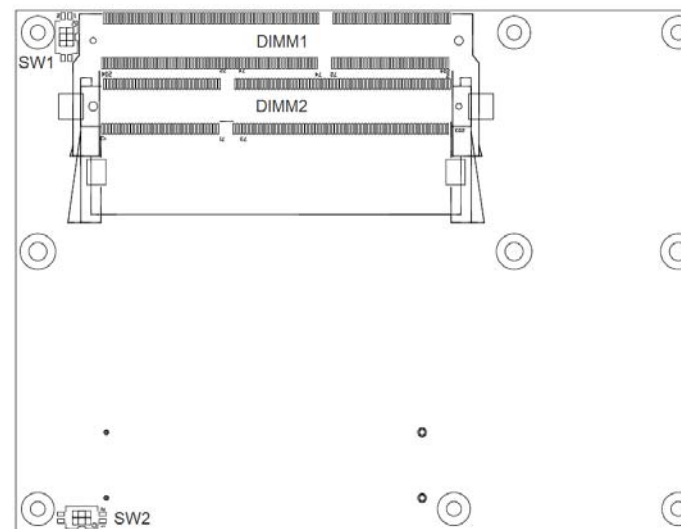
Checklist

- ✓ CEM841 Board x1
- ✓ Product Information CD x1
- ✓ Quick Installation Guide x1

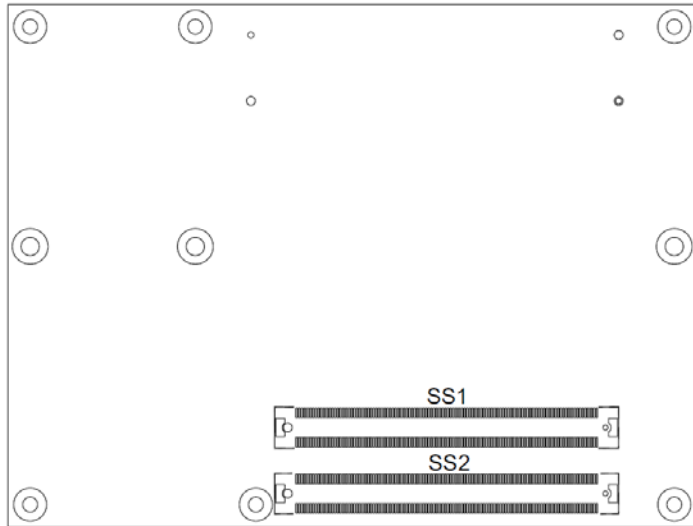
Note: Please contact your local vendors if any damaged or missing items. DO NOT apply power to the board if there is any damaged component.

Please refer to the product information CD for the complete user's manual, drivers and utilities. User's manual and related documents are in Acrobat PDF format.

Board Layout



Top View



Bottom View

Switch Settings

Before applying power to the CEM841, please make sure all of the switches are in factory default positions.

Switch	Description	Setting
SW1	Auto Power On Default: Disable	SW1-1 OFF
	Restore BIOS Optimal Defaults Default: Normal Operation	SW1-2 OFF
SW2	PATA Device Setting Default: Disable	SW2-2 OFF

Connectors

Connector	Description
DIMM1	Channel 1 DDR3L SO-DIMM Socket
DIMM2	Channel 0 DDR3L SO-DIMM Socket
SS1	COM Express™ Connector
SS2	COM Express™ Connector

Installing Heatsink

For thermal dissipation, a thermal solution enables the CEM841's components to dissipate heat efficiently. All heat generating components are thermally conducted to the heatsink in order to avoid hot spots. Figure below illustrates how to install the thermal solution on CEM841.

1. There is a protective plastic covering on the thermal pads. This must be removed before the heatspreader can be mounted.
2. Each thermal solution is designed for a specific CEM module. The thermal pads on the heatspreader are designed to make contact with the necessary components on the CEM module. When mounting the heatspreader you must make sure that the thermal pads on the heatspreader make complete contact (no space between thermal pad and component) with the corresponding components on the CEM module. This is especially critical for CEM modules that have higher CPU speeds (for example 1.46GHz or more) to ensure that the heatspreader acts as a proper thermal interface for cooling solutions.
3. Before installing the heatspreader to the CPU module, please apply thermal grease on the CPU die. This CPU module has four assembly holes for installing heatspreader plate. Use the four screws to secure the heatspreader plate to the CEM841. Be careful not to over-tighten the screws. Then, apply thermal grease at the bottom of heatsink and secure the heatsink on the heatspreader by another four screws.

