

CEM310 / CEM311 Quick Installation Guide

Quick Start

The basic procedures required to power on CEM310/311:

- (1). Require DC +4.75V~20V power at minimum 6.75A (4.75V) and 1.6A (20V). Make sure the power is OFF before connecting the CEM310/311.
- (2). Check to ensure the onboard switch SW1 is set to default (ON (up) position).
- (3). Attach thermal solution to the CEM310/311, refer to section Installing Thermal Solution.
- (4). Install the CEM310/311 onto COM Express™ baseboard, for example, CEB94008 or CEB94017 baseboard.
- (5). Properly install all necessary peripheral devices such as hard disk, display, keyboard and etc. to the baseboard.
- (6). Firmly attach power supply to the baseboard power connector.
- (7). Turn on the system power.
- (8). Press power button on the baseboard to start CEM310/311.

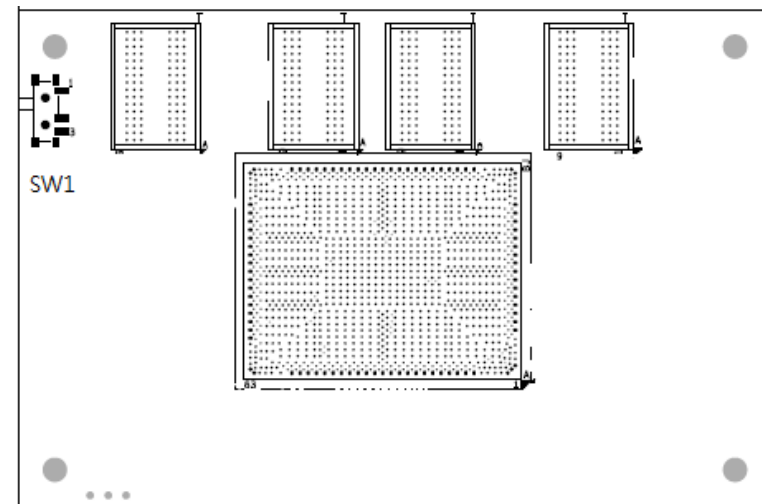
Checklist

- ✓ CEM310/311 Board x1
- ✓ Product Information DVD x1
- ✓ Quick Installation Guide x1

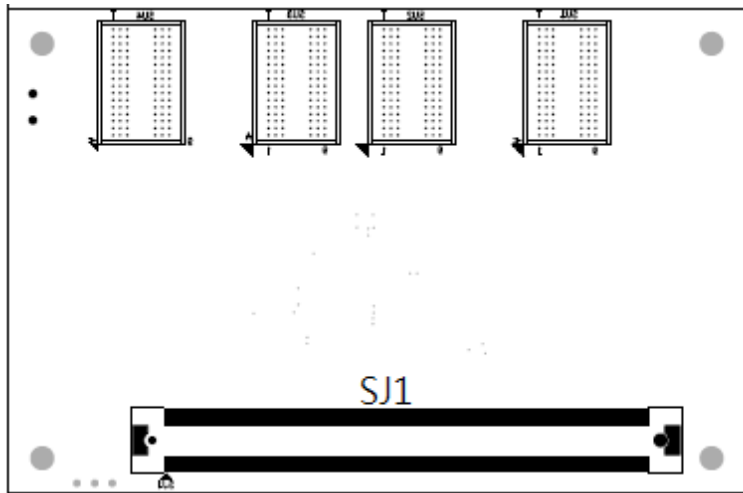
Note: Please contact your local vendors if any damaged or missing items. DO NOT apply power to the board if there is any damaged component.

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

Module Layout



Top View



Bottom View

Switch Setting

Before applying power to the CEM310/311, please make sure onboard switch is in factory default position.

Switch	Description	Setting
SW1	Auto Power On Default: Disable	SW1 ON (Up)

Connector

Connector	Description
SJ1	COM Express™ Connector

Installing Thermal Solution

For thermal dissipation, a thermal solution enables the CEM310/311's components to dissipate heat efficiently. All heat generating components are thermally conducted to the heatspreader in order to avoid hot spots. Below images illustrate how to install the thermal solution on CEM310/311.

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 CEM310/311. 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.

