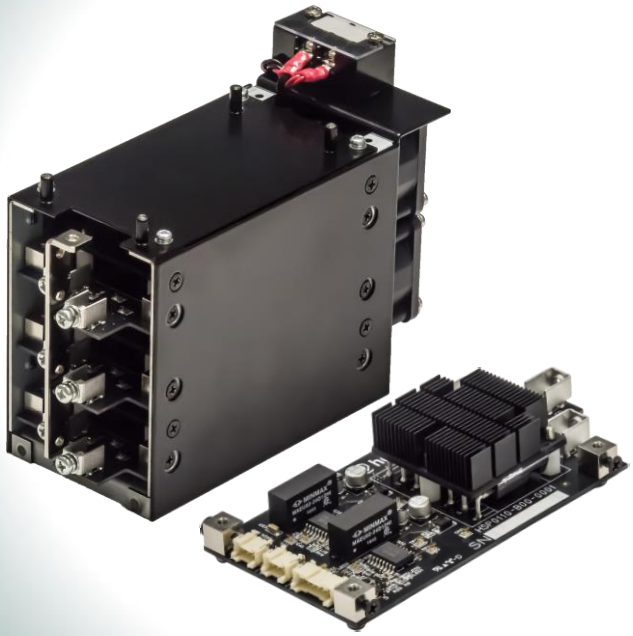
headspring
Sustainable Energy Solutions

Circuit Block for Bi-Directional Switch

HGCB-6C-401100
HGCB-2C-401100



Abstract

- Circuit block of bidirectional switching circuit with SiC-MOSFET
- Drain connected 2 SiC-MOSFET power diveces, gate drive circuit, gate power supply on board
- Casing for 3 board mounting and cooling
- Circuit protection against shoot-through, under voltage of gate drive
- Capacitor, Reactor, Power Supply and Cabling shall be provided by customer
- Snubber circuit should be designed to fit to operational parameter

Features

Single Board Bidirectional Switching Circuit

- ✓ Various types of topology are realized by combination such as Matrix Converter
- ✓ Isolation Implemented

Useful Option for Combination

- ✓ Forced cooling casing for 3 board mounting
- ✓ Control signal cable is attached
- ✓ Line inductance can be reduced by copper bar (Option)

Free Circuit Diagram Information Provided

- ✓ Various Customization Available
- ✓ For Reference of User's Circuit Design

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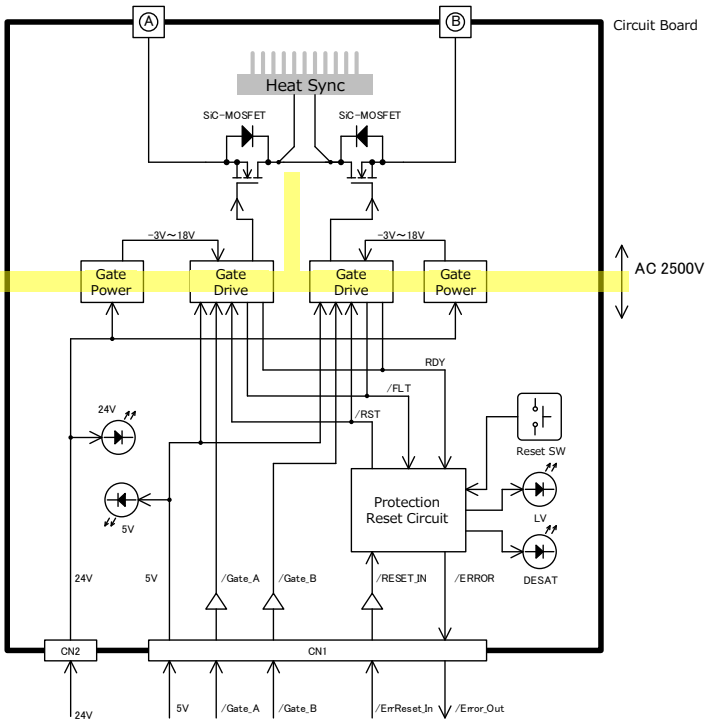
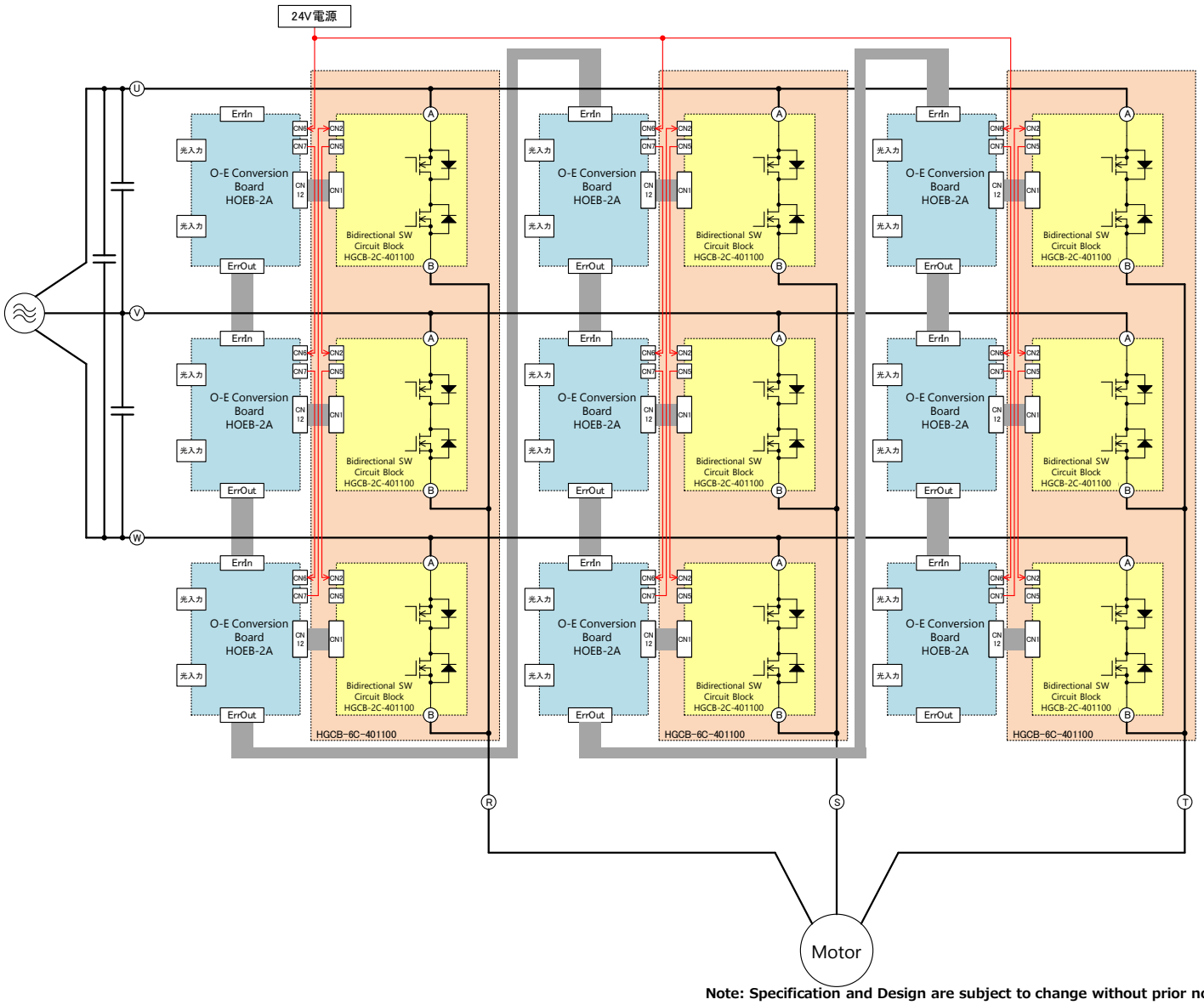
Specifications

Subject	Specification	Note
Voltage Range	0V～400V	A-B Port
Maximum Current	10Arms	A and B Port
Maximum Switching Frequency	200kHz	
Minimum Dead-time	200ns	
Power Supply	DC24V and DC5V	
Size	W 166mm D 66mm H 116mm	HGCB-6C-401100
	W 122mm D 60mm H 23mm	HGCB-2C-401100

Block Diagram : HGCB-2C-401100



Example: Matrix Converter



Note: Specification and Design are subject to change without prior notice

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