

# IMP-GSB-S3 General Servo Bus Daughter Board

# **Features**

- Support SSCNET III protocol
- Built-in general servo bus
- Serial optical fiber transmission-based servo interface
- Multi axis synchronous control employed in communication cycle
- Use the dedicated ASIC for SSCNET III
- Built-in error detection and retransmission mechanism during the transmission cycle



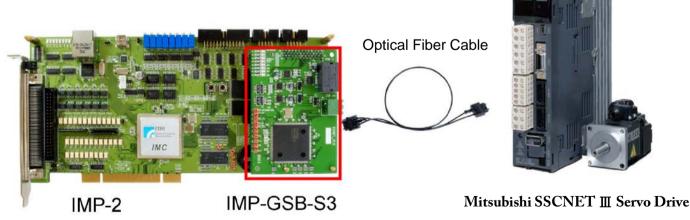
IMP-GSB-S3

## Introduction

The general servo bus daughter board (for Mitsubishi SSCNET Ⅲ) is developed by the MSL of ITRI for connecting the servo drives which use the SSCNET III protocol. It is mainly used for the motor-based motion control applications in general industrial machines. The IMP-2 (intelligent motion control platform) connects the general servo bus daughter board via the General Servo Bus (GSB) to construct a motion control system which can complete the data transmission within a transmission cycle. With the wiring simplified connection and digital serial communications, the IMP-2 can connect up to 8 axes of servo drives to control motors through the daughter board. Such network-based digital servo drives architecture can significantly reduce the wiring complexity and improve the resistance against noise during the signal transmission. Therefore, it not only provides the flexibility and real-time response required for the high-speed and high-accuracy motion control, but also improves the reliability and renders easy maintenance of the system.

## **Specifications**

- Main Board Connection Interface: General Servo Bus
- Servo Connection Interface: Optical Fiber Cable
- Servo Transfer Rate: 50Mbps
- Servo Communication Cycle: 0.88ms
- Maximum distance between stations: POF 20m/HPCF 50m
- Power Requirement: 5V (350mA max.)
- Dimensions: 66mm x 96mm



(MR-J3-B)

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