



Software House Bridge Integration Guide

Overview

Mercury has created a set of boards to bridge to the Software House iSTAR Pro controller family. This document outlines the details needed by Mercury Partners in order to integrate these new products into their software. The new boards will be based on existing Mercury products that are already familiar to Mercury OEM partners.

MS-ICS

The MS-ICS is the replacement for the Software House GCM board. The design is based around the EP2500.

Device IDs	Values
Hardware ID	114
Product ID	2 (EP Series)
Product Version (Model)	22

Additional Details:

- 10/100 Ethernet port
- 12 Vdc power in
- 34-pin connector to the MS-ACS. This will handle RS-485 from the MS-ICS to the MS-ACS boards.
- 1 downstream RS-485 port (2-wire)
- Supports secondary host connection via Lantronix module
- Cabinet tamper, AC power failure, and low battery inputs

MSP1 Ports:

- There are two downstream RS-485 ports. One handles the ribbon cable that the MS-ACS boards are connected to, the other is the external RS-485 port on the MS-ICS.
- Example of 108 commands:
 - 108 0 1234 0 1 38400 90 0 0 // downstream port for MS-ACS
 - 108 0 1234 1 2 38400 90 0 0 // external port (TB2)
- The downstream RS-485 port used for the ribbon cable supports two channels. The MS-ACS boards will use channel 1 and any SIO connected to the downstream RS-485 ports

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on the MS-ACS will use channel 2. SIO addressing on each channel is independent of the other channel.

- When defining the SIO (109 command) for the MS-ACS boards set both *channel_in* and *channel_out* to a value of 1. Supports addresses 0-7.
- When defining a SIO connected to the RS-485 ports on the MS-ACS, set both the *channel_in* and *channel_out* to a value of 2. Supports addresses 0-31.

MS-ACS

The MS-ACS is the replacement for the Software House ACM board. Up to two of these boards can be connected to the MS-ICS board via the 34-pin ribbon connectors. This board also has 8 downstream RS-485 ports used to connect downstream I/O modules. Each MS-ACS board has 8 downstream RS-485 ports and it is recommended that only 1 or 2 downstream SIOs be connected to each individual port and not to go beyond that.

When defining the SIO for the MS-ACS, the *channel_in* and *channel_out* fields in the 109 command need to be set to a value of 1.

When defining an SIO connected to the RS-485 port on the MS-ACS, both the *channel_in* and *channel_out* fields need to be set to a value of 2.

The MS-ACS has two processors so it will look like two SIOs running on a single board. There is a single dip switch selection used to configure the address of the first SIO on the board. The second SIO will be the next SIO address. The first MS-ACS connected directly to the MS-ICS can be at addresses 0 and 1 or 4 and 5 based on the dip switch setting. The second MS-ACS connected to the first MS-ACS can be at addresses 2 and 3 or 6 and 7 based on the dip switch setting.

SIO Definition (command 109) Fields	Recommended Values
nInputs	8
nOutputs	4
nReaders	4
Hardware ID	157
Model	140

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APPLICATION NOTE

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MS-I8S

The MS-I8S is the replacement for the Software House I8 board. This board will be based off of the MR16in board with fewer inputs and no outputs.

SIO Definition (command 109) Fields	Recommended Values
nInputs	8
nOutputs	0
nReaders	0
Hardware ID	158
Model	141

MS-R8S

The MS-R8S is the replacement for the Software House R8 board. This board will be based off of the MR16out board but with fewer outputs.

SIO Definition (command 109) Fields	Recommended Values
nInputs	0
nOutputs	8
nReaders	0
Hardware ID	159
Model	142

RM-4 / RM-4E

Mercury currently does not have a direct replacement for these Software House boards. The recommended replacement is to use an MR50 in the place of the RM-4 / RM-4E.

Mercury is investigating if a Mercury replacement version will be made. More details to come.

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