

Applied Data Sciences / Proprietary Products (GHIF®) *High Speed Data Link between Harris computer & Encore computer*

The Encore-Harris computer Interface Board (GHIF) provides a transparent link for transferring data and status between the Encore High Speed Interface (HSDII) card and the Harris Buffered Block Channel Interface (BBC) card. The transfer link reformats the word structures of the Encore and Harris computers. The GHIF handles data in any of three software-selectable formats:

1. floating point,
2. integer or fixed point and
3. bit format.

The GHIF automatically adjusts its transfer rate based on the speed of the Encore and Harris computers. In most cases, the GHIF transfers data and status without adding any delays. The floating-point format may add some delay.

Ordering Information:

Specify **GHIF, P/N: 0700205**. Includes: technical documentation, and 20' cables. You can E-mail us at sales@appdatasci.com or call us at 972-242-7944 for pricing information.

Major Features:

- **Fast Data and Status Transfer** - The speed of the Encore and Harris computer interface cards (HSDII and BBC) determine the transfer rate. In most cases, the GHIF adds no delays.
- **Bi-directional Data and Status Transfer** - The GHIF transfers data and status in either direction between the Encore and Harris computers.
- **Data Formatting** - The GHIF adjusts the word format between the 32-bit word Encore computer and the 24-bit word Harris computer.
- **Variable Transfer Operations** - With software selection, transfers can consist of a single word or multiple-word blocks.
- **Data Integrity** - Status signals relayed among the cards provide for smooth and accurate transfer.
- **Easy Installation** - The GHIF plugs into the rear of the Encore computer chassis opposite the HSDII card. Four 40-conductor ribbon cables run from the GHIF to the Harris BBC

Functional Description:

Either the HSDII (Encore) or the BBC (Harris) can control the GHIF. Under software control, either of these boards can issue commands, reformat data, transfer data, request and receive status, open a channel to the other computer, and reset the GHIF. The GHIF is a hardware only product. No software is supplied by Applied Data Sciences.

Installation:

Installation of the GHIF is easy. It requires plugging in the GHIF card plus setting jumpers on the Encore HSDII and Harris BBC cards. The GHIF plugs into the rear of the Encore computer chassis opposite the HSDII card. Four 40-conductor cables connect the GHIF to the Harris BBC. Only one jumper must be set on the Encore HSDII. The Harris BBC requires the setting of two jumpers. Each GHIF board comes complete with installation instructions and connecting cables.

Data Formats:

The GHIF reformats data between the 32-bit Encore and 24-bit Harris word structures. The GHIF can transfer data in any of three formats - floating point, integer or fixed point, and bit format. Sign bits are never altered during reformatting.

Specifications:

Physical:

- **Board:** .07 inch wirewrap. Voltage and ground planes etched in copper on both sides.
- **Dimensions:** Width: 15 inches, Height: 1.25 inches, Depth: 9.1 inches.
- **Connectors:** Encore side: Two 54-pin gold wiping contacts for .025-inch square pins.
- **Weight:** 2 pounds.

Electrical:

- **Power** is supplied via the Encore backplane. Voltage: +5 VDC and Current: 3.5 amps max.

Environmental:

- **Temperature:** 0 to 55 degrees Celsius operating, and -40 to +80 standby.
- **Humidity:** Up to 95% RH without condensation.
- **Altitude:** 0 to 10,000 feet AMSL operating, and 0 to 40,000 feet AMSL standby.
- **Vibration:** Withstands normal transportation stresses.
- **Cooling:** Provided by built-in fans in the Encore chassis.

Transfer Rates:

- **GHIF - HSDII:** 3.2 megabytes a second
- **GHIF - BBC:** 2.7 megabytes a per second
- **System:** Determined by the Encore and Harris boards. In most cases, the GHIF adds no delays

Software:

- **Encore Operating Systems:** MPX-32, revision 3.2 or higher
- **Harris Operating Systems:** VOS, revision 5.1 or higher