COMMON MEMORY PORT

The common memory port is a node which interfaces a foreground channel loop with the backgrounds common memory. The EB module is this interface and there is one of these modules per channel loop. Below is a list of the main areas on the EB.

Channel function decodes
Foreground Access Register
Interrupt Address Register
Data Buffer
Length Register
Status Register
Common Memory Error Address Register
I/O Memory Reference Control
Common Memory Address Register

Channel Function Decode

The EB module communicates with a channel loop. The channel functions, the EB node with functions 20-33. See the common memory function chart, the function response chart, in this section, and also refer to the hardware reference manual for further description.

Foreground Access Register

This is a 64 bit register which is used for one word read or write to common memory. It is also used to assemble and disassemble data to the foreground processor via the channel loop.

Interrupt Address Register

This 16 bit register is entered with a interrupt address via a 21 function. The interrupt address is sent to the channel loop during a foreground call sequence if the EA module wants to interrupt. A interrupt occurs for a single or double bit common memory error if the related interrupt enable bit is set in the status register.

Data Buffer

The EB has a 64 words by 64 bit buffer used for block data transfers between common memory and the channel loop. Only a read or write may be active at a time.