

VLB ARRAY MEMO No. 561

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Monitor/Control Bus ID Assignments
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The Monitor/Control Bus (hereafter MCB) standard interface responds to a pair of low numbered addresses, in the range 0000 to 0100 hexadecimal, to set the address and length of the main block of command and monitor addresses to which the interface will respond. These addresses are determined by the interface by making a special request to their attached device for a seven bit number (plus parity). This number will be referred to here as the ID byte. The addresses of the main blocks of the interfaces will be set by the station computers, using values installed in their software at compile time.

The ID byte is communicated to the standard interface on its bidirectional data bus after a request. The eighth bit of the byte is odd parity. The equipment to supply the ID byte on request is built into the device controller, with the possibility that wires may be routed through a module (or other) plug so that the ID byte may depend on the module's location as well as the device type in which the interface is installed.

Therefore, MCB main address blocks are set by software which is relatively easy to change; ID bytes are wired in, are relatively hard to change, and hard enough to account for that all interfaces of the same functionality should have the same ID.

I have accepted requests for ID assignments, and, rather arbitrarily assigned IDs to interfaces installed in these devices. The requests which have so far come to my cognizance are as follows.

Device	ID
Frontends	0x (sixteen combinations reserved)
2-16 GHz synthesizer #1	10
2-16 GHz synthesizer #2	11
LO Switch controller	12
LO Tmtr/Rcvr	13
Maser interface module	14
Weather Station	18
Baseband converters (rack 1)	2x (eight combinations - 20 to 27)
IF Distributors (rack 1)	28,29
Recorder (transport 1)	2A
Formatter (number 1)	2x (x to be chosen from B through F)
Baseband converters (rack 2)	3x (eight combinations)
IF Distributors (rack 2)	38,39
Recorder (transport 2)	3A
Formatter (number 2)	3x (x same as for Formatter 1)
Antenna control unit	70
Focus/Rotation driver system	72

There are expected to be additional monitor points not logically associated with the ones above, for thermal, tilt, power, and other environmental sensors. It is not clear to me how many (if any) additional interfaces are required for this data.