

NAME

lc3588 – LeCroy 3588 Histogramming Memory Module

DESCRIPTION

The LeCroy 3588 Histogramming Memory Module is an MCA module that is used in `spec` with the LeCroy 3512 Spectroscopy ADC module. The 3588 is chosen in the `config` file as

```
CA_LC3588 = slot_number
```

The module can be hardware configured for either 16K of 24-bit wide channels or 32K of 12-bit wide channels. `spec` currently only supports the first configuration.

FUNCTIONS

`mca_get(g, e)` – gets data from currently selected group on the 3588, and transfers it to element *e* of `spec` data group *g*.

`mca_put(g, e)` – writes data to the currently selected group on the 3588, taking it from element *e* of `spec` data group *g*.

`mca_par("clear")` – clears the channels of the current group.

`mca_par("run")` – starts acquisition. Note that the `tcount()` and `mcount()` functions (used in the counting macros) will also start acquisition.

`mca_par("halt")` – stops acquisition. Note that the 3588 will also be halted when the `tcount()` and `mcount()` functions (used in the counting macros) complete their count intervals or are aborted.

`mca_par("group_size")` – returns the current group size.

`mca_par("group_size", size)` – sets the group size to *size*. Legal values are 256, 512, 1024, 2048, 4096, 8192 and 16384.

`mca_par("select_group")` – returns the currently active group. Groups are numbered starting at zero.

`mca_par("select_group", group)` – set the active group to *group*. Groups are numbered starting at zero. The number of possible groups depends on the group size. If *group* is greater than the maximum number of groups, the current group is set to *group* modulus the maximum number of groups.

`mca_par("readone", channel)` – returns the contents of channel number *channel*. The channel number is with respect to the current group.

`mca_par("chan#")` – returns the contents of channel number *#*. The channel number is with respect to the current group.

`mca_par("chan#", value)` – sets channel *#* to *value*. The channel number is with respect to the current group.