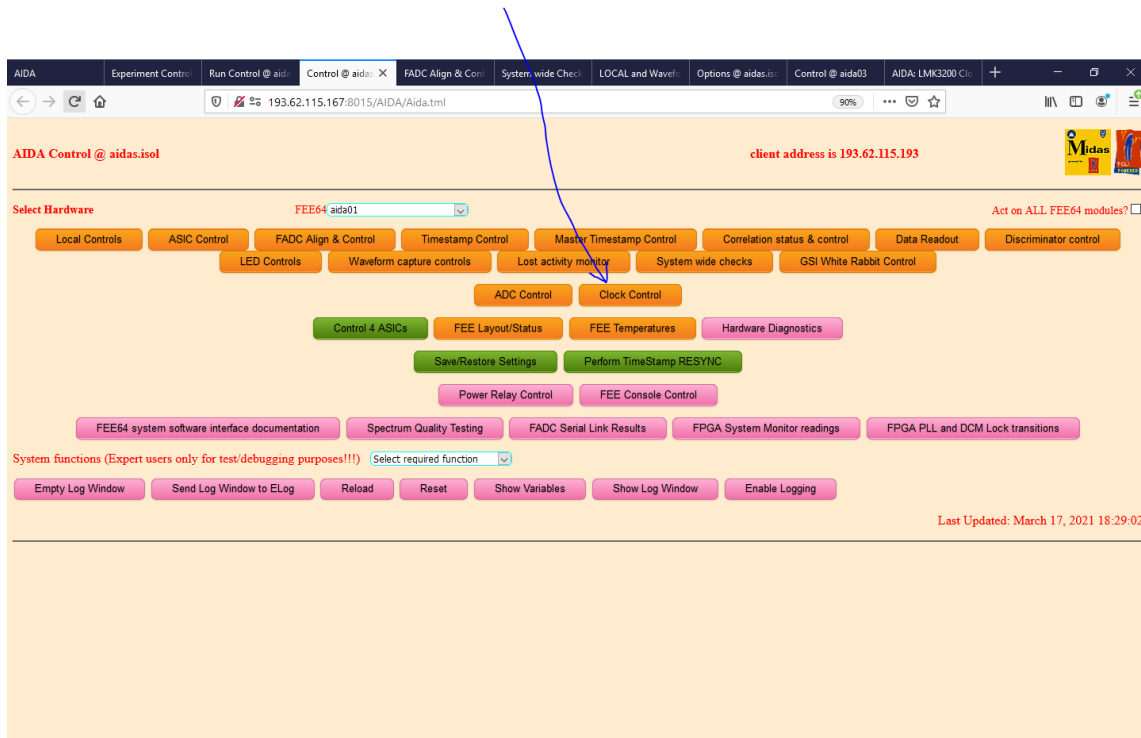


Calibrating the LMK3200 clock devices on the AIDA FEE64

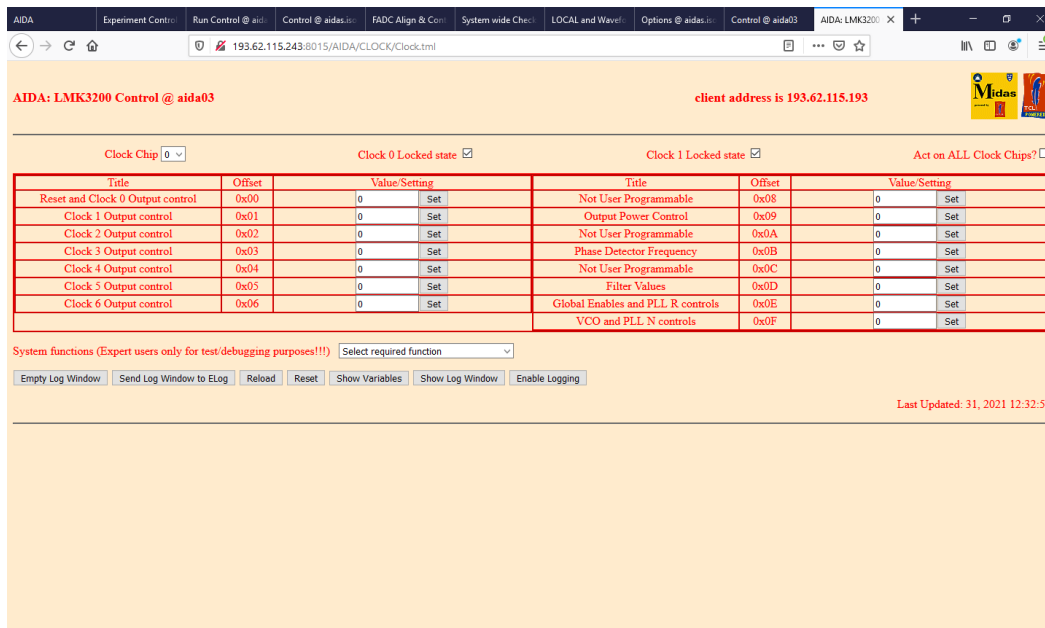
If the System Wide checks reports a clock fault in one of the FEE modules.

Open a browser window to the faulty FEE using <http://< FEE IP address>:8015/AIDA/Aida.tml>

In the opened Control window select Clock Control



This opens the following window



From the System Functions menu select “Register default settings”

The screenshot shows the AIDA LMK3200 Control interface. At the top, there are several tabs: AIDA, Experiment Control, Run Control @ aid..., Control @ aidas.io, FADC Align & Con..., System wide Che..., LOCAL and Wavel..., Options @ aidas.io, Control @ aid03, and AIDA: LMK3200. The browser address bar shows 193.62.115.243:8015/AIDA/CLOCK/Clock.html. The main header displays "AIDA: LMK3200 Control @ aid03" and "client address is 193.62.115.193". Below the header, there are controls for "Clock Chip" (set to 0), "Clock 0 Locked state" (checked), "Clock 1 Locked state" (checked), and "Act on ALL Clock Chips?" (unchecked). A table of register settings is displayed, with a blue arrow pointing to the "System functions" dropdown menu. The table has columns for Title, Offset, and Value/Setting. The "System functions" dropdown is currently set to "Select required function". Below the table, there are buttons for "Empty Log Window", "Send Log Window to ELog", "Reload", "Reset", "Show Variables", "Show Log Window", and "Enable Logging". The bottom right corner shows "Last Updated: 31, 2021 12:32:56".

Title	Offset	Value/Setting	Title	Offset	Value/Setting
Reset and Clock 0 Output control	0x00	0 Set	Not User Programmable	0x08	0 Set
Clock 1 Output control	0x01	0 Set	Output Power Control	0x09	0 Set
Clock 2 Output control	0x02	0 Set	Not User Programmable	0x0A	0 Set
Clock 3 Output control	0x03	0 Set	Phase Detector Frequency	0x0B	0 Set
Clock 4 Output control	0x04	0 Set	Not User Programmable	0x0C	0 Set
Clock 5 Output control	0x05	0 Set	Filter Values	0x0D	0 Set
Clock 6 Output control	0x06	0 Set	Global Enables and PLL R controls	0x0E	0 Set
			VCO and PLL N controls	0x0F	0 Set

Select “Act on all Clock Chips” in the top right hand corner.

From the “System functions” select Calibrate LMK3200 for incoming clock”

This takes a few seconds and reports the bit sequences sent to the LMK3200 registers; disregard.

Check that the two “Clock # locked state” tick boxes are ticked.

If this doesn’t work then operate a RESET/SETUP of this FEE from the RunControl window.

If this still doesn’t work then Check the HDMI cable and the MACB structure.