

TECHNICAL NOTE FOR REPLACING 352MHz LLRF VXI MODULES

1. Turn off rf system rf drive. Check to see that the Collector Interlock has reduced the rf system klystron beam power to a safe level.
2. Shut off the VXI-crate ac power utilizing the pushbutton switch on the crate.
3. Remove all cabling from the LLRF VXI module to be removed.
4. Remove the LLRF VXI module from the crate by loosening the upper and lower captive module screws and pushing on the module ejector tabs until the module is pulled free from the rear bus connectors, and carefully sliding the module completely out of the crate.
5. Install the replacement LLRF module in the VXI crate, by carefully sliding the module into the slot and firmly pushing the module into the rear connectors. The module is properly seated in the rear bus connectors when it's front panel is flush with immediately adjacent modules or panels.
6. Re-attach system cabling to the replacement LLRF module.
7. Turn on the VXI-crate ac power.
8. Re-boot the associated VME crate by pressing the "reset" button on the lower front panel of the VME crate.
9. Normal EPICS screen displays should appear within 2 minutes of the VME re-boot. If after 2 minutes the EPICS screens display white or static (values not changing) process variable values, there may be a problem with the control system. Check to see if there are any red "fail" lamps lit on any VXI modules in the tub, and also that all "trigger" and "access" lamps are flashing on the modules. If all module tally lights appear normal but the EPICS screen displays are still abnormal, contact MCR and the Controls Group for assistance.
10. Re-start the rf system and check for proper LLRF operation.

Note: If replacing a LLRF VXI module is part of a system troubleshooting operation and it does not remedy the specific LLRF performance problem, re-install the original LLRF VXI module before continuing to troubleshoot the original problem. Failure to do so may result in the introduction of multiple LLRF and system operational difficulties that could mask or compound the original problem.

