

TECHNICAL NOTES

TN104 Removing Modules from a M4x Blade

Removing Modules from a M4x Blade

Occasionally, it is necessary to remove a module from the M4x Blade. This should be done in accordance with the following procedure. Failure to follow this procedure could cause damage to the module as well as the main motherboard.

Before starting, ensure you are working at a proper ESD workstation to avoid damaging the internal circuitry of the M4x due to static electricity discharge.

- 1. Disconnect the power source as well as the USB cable from the Blade.
- 2. Remove the cover of the Blade by loosening the two captive fasteners and the two black screws from the rear of the unit.
- 3. Remove the 3/8 hex nut on the power connector at the rear of the blade.
- 4. Inside the Blade you will see two stainless screws fastening the main module to the chassis. Remove both screws and set aside. **Note:** If a VoIP module is installed in this blade, you will need to remove the VoIP module in order to remove the screws. *Refer to the section toward the end of this tech note for instructions on safely removing the VoIP module.*
- 5. You will now be able to lift the assembly and remove it from the chassis. Make sure you do not catch the LEDs on anything when removing the motherboard as they can break off easily. Do this by gently pushing in from the front of the unit and lifting gently upward on the back of the unit. When done, set the chassis aside and place the module on an ESD safe surface.
- 6. Using a non-metallic tool, gently pry the edge of the module up alternating on each side, as opposed to prying just one side up all at once.
- 7. Next remove the module and set it aside. Repeat this process if removing more than one module.

An alternate means of removing the module, although less safe, is to use an IC extraction tool like the one shown in the photo below. It is not necessary to disassemble the unit per the above procedure. Slip the ends of the tool under the module you want to remove, as shown in the next photo. Gently pull up until the module begins to unseat. Then switch sides with the tool and gently pull up again. Repeating this about two times should loosen the module enough to remove it.

