



CENTER FOR ASTRONOMY SIGNAL PROCESSING AND ELECTRONICS RESEARCH

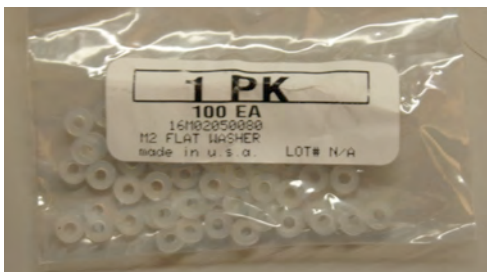
IMPORTANT SCIENCE SAFETY NOTICE # 001

Threat Level:	III-Alpha
Affected Devices:	IBOB Boards, All Revisions (v1.0, v1.1, v1.2, v1.3), All Serial Numbers
Issue:	<p>It has come to the attention of the CASPER group via diligent investigation by Jason Ray and Randy McCullough with NRAO that, under certain conditions, the fastening screws securing the CX4 connectors to the IBOB printed circuit board (PCB) can impinge on a bottom layer power trace causing a short to the grounded CX4 connector housing on the affected traces. This problem will manifest itself as data integrity and reliability issues in systems with gateway designs utilizing the CX4 connectors for any purpose, including but not limited to IBOB-IBOB, IBOB-BEE2 and IBOB-Workstation communication using either 10 Gigabit Ethernet or XAUI interface blocks.</p>
Resolution:	<p>This issue can be successfully mitigated by applying a layer of electrical insulation between the CX4 fastening screws and IBOB PCB. A working solution is presented in the attached document, "IBOB Repair Instructions for Science Safety Notice #001."</p>
Contact:	<p>For further information, contact Mark I. Wagner at +1.510.590.8305.</p>

IBOB Repair Instructions for Science Safety Notice #001

This document describes repair instructions for IBOB boards pursuant to Science Safety Notice #001.

Step 1: Acquire replacement screws and insulating washers (screws x 4, washers x 4, per IBOB). Optional: Locktite 222MS or equivalent for screw threads.

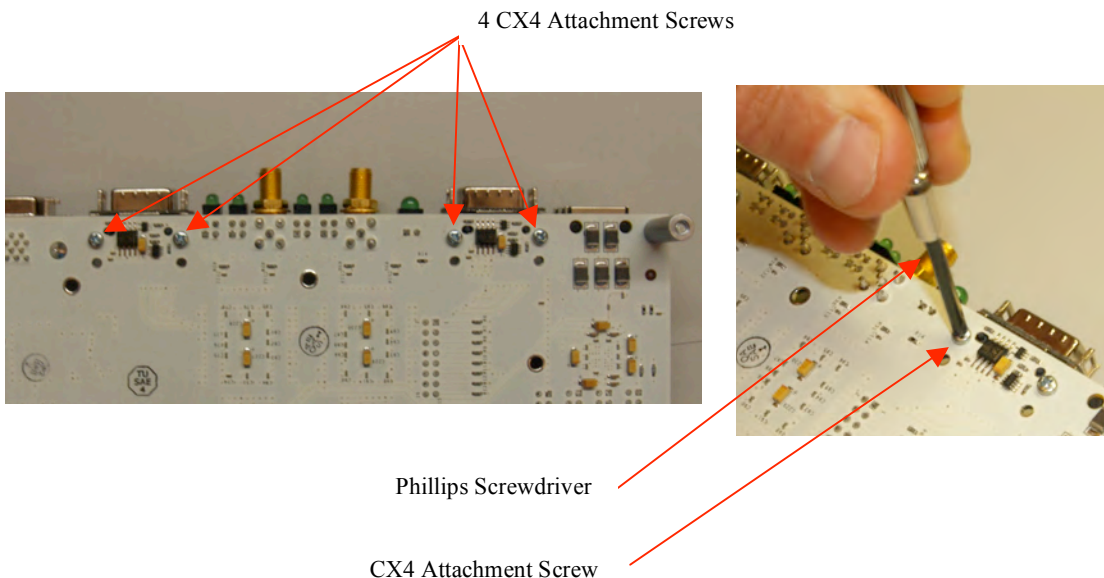


Nylon 6/6 plastic washer, 5mm OD, thickness, .67 to .93mm, M2 Size, www.mcmaster.com P/N 95610A110

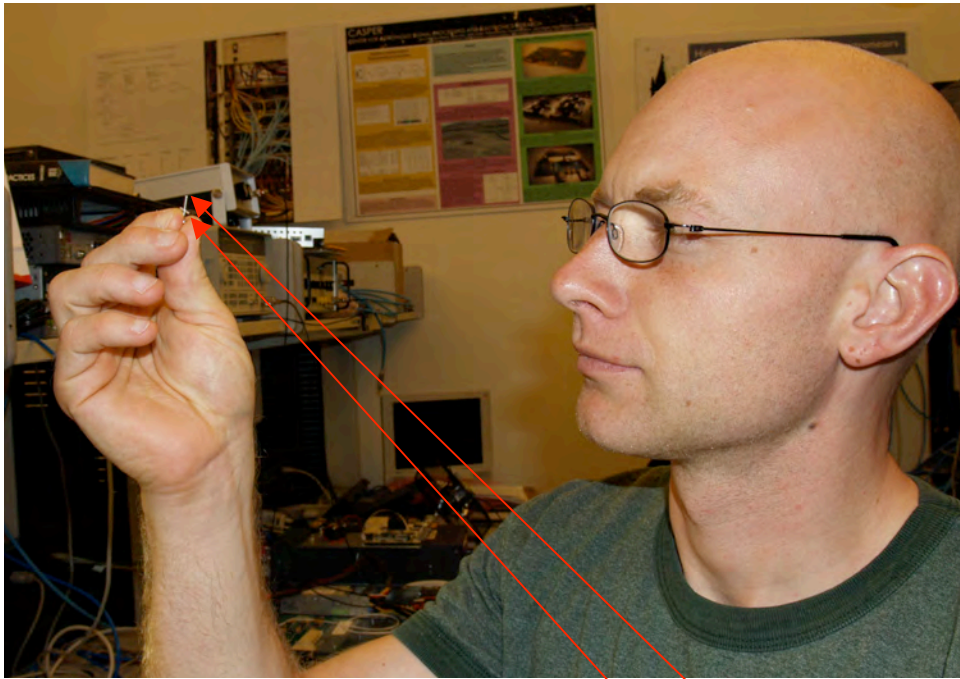


18-8 stainless steel Phillips head machine Screw, M2 Size, 12mm Length, .4mm Pitch, www.mcmaster.com P/N 92000A019

Step 2: Remove CX4 attachment screws using a Phillips head screwdriver.

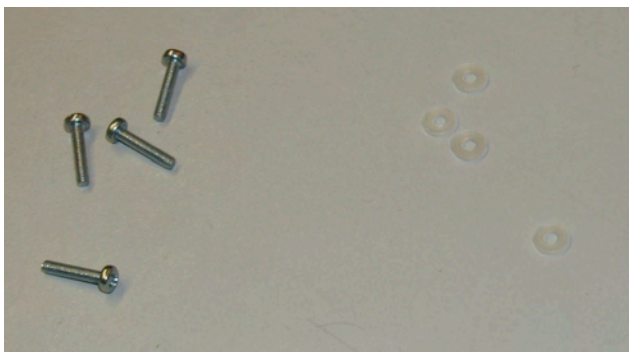


Step 3: Push 18-8 stainless steel replacement screws into 6/6 nylon plastic washers.
Optional: Apply Locktite 222MS or equivalent to screw threads.



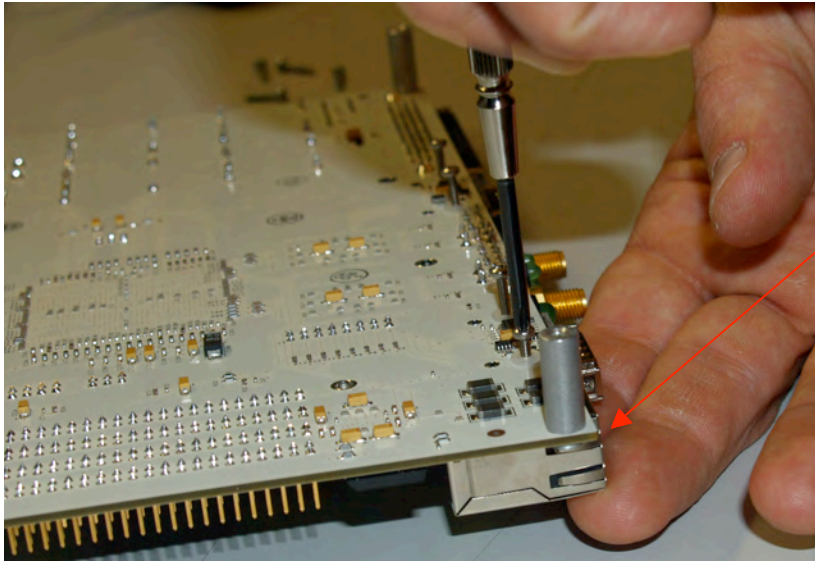
18-8 Stainless Steel Replacement Screw

6/6 Nylon Plastic Washer

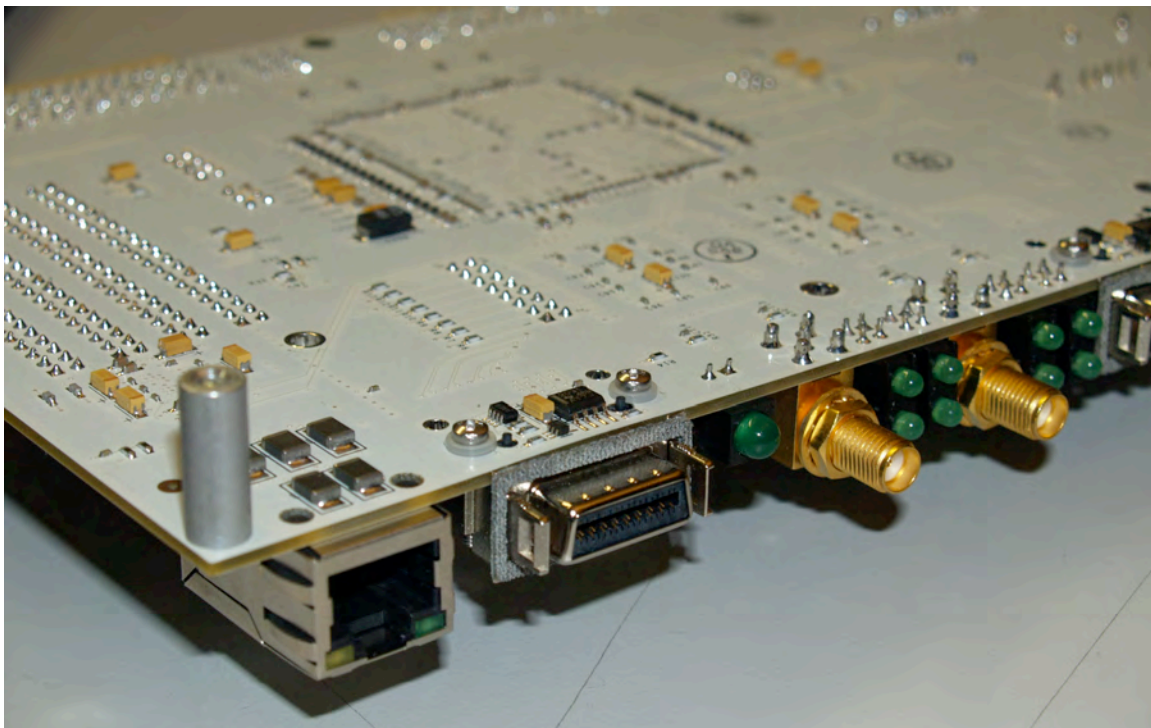


Optional: Locktite 222MS or equivalent would be applied here.

Step 4: Replace removed CX4 attachment screws with new screw/washer combinations.



Note use of hand for support.



Completed Repair: Science Safe.