Trio Motion Technology
BREATHING LIFE INTO MACHINES

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Subject: **Ver D Axis Expander Modification**

Technical Bulletin

1. Background:

It has been found in one application, that where 3 axis expander modules are fitted on a system. Incorrect data may be read occasionally by the MC216/MC224 controller. The fault appears to be caused by very short noise pulses appearing on the RESET line of the ribbon cable bus. The fault can lead to incorrect movements on the axes under control.

2. Avoiding the potential problem:

Trio recommends that a 1nF ceramic cap is soldered onto all 3 version D axis expanders where they are used in applications requiring 3 axis expanders (See diagram). Future shipments from Trio will all include this modification. The capacitor can be fitted to all axis expanders without causing any detrimental effects. Version E PCB's will have the capacitor fitted on the PCB.

3. Fitting a 1nF ceramic capacitor to the *reverse* of the PCB:

- Remove the PCB from the metal chassis.
- Solder a through hole 1nF ceramic capacitor between the pins illustrated.
- Ensure there is no possibility of short circuits
- Reassemble the chassis