**FDC Defect Possibilities**

Solder defects:

 Cathodes:

 Circuit traces or solder pads damaged by improper solder technique

Poor connection or open connection between connector and circuit traces (on daughter boards) or poor or open connections between daughter board and cathode

Bubbles under solder pads from excessive heat applied during solder process (delamination)

 Wire Frames:

Poor condition of solder on solder pad (rough surface, spikes of solder sticking up, etc.)

Wire remnants sticking out of solder

Too little, or too much, solder

Process defects:

 Cathodes:

 Misaligned panels

 Fingerprints

 Adhesive on copper surface

Copper deformed by improper technique (example: peeling up tape dry, at 90 deg angle to surface)

Cut or damaged circuit traces from improper handling or working technique

 Wire Frames:

 Broken wires, damaged wires (from impact)

 Mislocated wires

Wires above solder pads (floating too far above the pad, but still anchored in solder at the top of the pool)

 Wires misaligned horizontally

 Wires tensioned incorrectly

 Adhesive wicking through vias

Adhesive on surfaces where it is not supposed to be, creating a surface imperfection

 Gas leaks through imperfectly applied adhesive

 Gas leaks between “O” ring and board surface irregularities

 Gas leaks through vias/board internal (multilayer) structure

Material defects:

 Surface flaws (small imperfections) as supplied from manufacturer

 Manufacturing defects (chemical damage, mechanical damage)

 Handling defects (wrinkled panels, other handling damage)

 Wire defects? (we haven’t seen any yet)