





I/O Measurement/Generation Cards (see Fig. 1)

Figure 2. Embedded Control Test

### TEST SEQUENCE AND COVERAGE

Test Name	Test Sequence	What it Tests
Power	Power on UUT Check key voltages using analog test card.	Key voltages within range?
CPU	CPU ID Check CPU BIST Check Take control of CPU	CPU OK? CPU infrastructure OK?
General Bus	Boot ROM Bus Test	Verifies access to boot flash
Flash Test	ID Check CRC Check	Verifies access to flash from CPU. Verifies flash and flash contents.
RAM	Memory test for opens, stucks and shorts to all buses. Optional test for all memory cells.	Verifies all buses from CPU to RAM Verifies that all RAM cells are operational.
Microcontroller I/O Test	Register Test Configure for normal operation	Verifies communications and buses from CPU to I/O functions Verifies I/O registers.
Sensor Inputs	Simulate all sensor inputs using ASSET's analog and frequency generation/measurement cards. Verify sensor inputs using A/D, timer, and general I/O readback at microcontroller using CPU emulator.	Verifies sensor input connector. Verifies signal conditioner IC's and components. Verifies microcontroller I/O functions.
Driver Outputs	Generate and change board outputs by accessing the microcontroller I/O functions using CPU emulator. Verify driver outputs using ASSET's general purpose I/O card. Repeat for various output levels	Verifies driver output connector. Verifies output driver IC's and components. Verifies microcontroller I/O functions.

### CONTACTS FOR ADDITIONAL INFORMATION

For contact details of our worldwide reps. please see our website:

<http://www.asset-intertech.com/contact.html>