Algocraft WN-REB04A to program 4 devices in parallel in a test system

Algocraft WN-PRG04A together with relay barrier WN-REB04A is used to program PIC18 microcontroller using ICSP protocol.

The Algocraft device is included in a high tech test system for a Bluetooth audio device.

Problem analysis / Objectives

Minimize amount of wires from test platform to Faraday cage inside test fixture.
Minimize programming lines wire length.
Minimize number of programmers needed to work with 4 devices in parallel.

Project development / Solution

The Algocraft device is installed inside a test fixture system, where four devices are placed to be programmed and tested in parallel. Since devices are RF sensitive, a Faraday cage is used to shield the device from external RF interferences.

Wiring to Faraday cage is reduced to RF shielded RS-232 communication. Each of the four WN-REB04A sites is wired to one of the device under test position, with wiring length of less than 0,2m, keeping high speed data transfer.

Conclusions / Comments from End Customer

With the Algocraft WN-REB04A we were able to achieve our client needs. With the programmer reduced dimensions, we could install it inside the Faraday cage, which was a key factor in the success of the project.
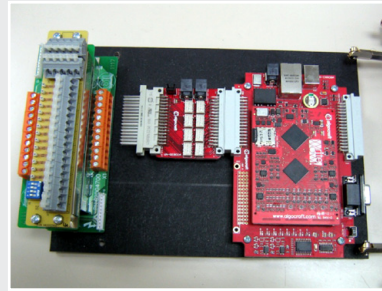
Decreasing wiring length, made the programming operation more robust and fast. Decreasing wiring to the Faraday cage increased the performance of the RF shield and reduced the maintenance cost.

About (Distributor Company & End Customer)

6TL Engineering, member of the Spanish Sistel Group, holds more than 30 years of experience in designing hardware modules that can be used to create innovative, true flexible and modular base test platforms.

6TL has established a highly efficient way to assemble base test platforms using only high quality products and interface systems to guarantee the best price performance for his customers.
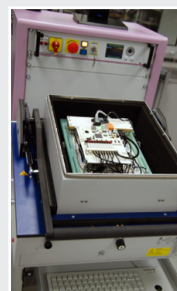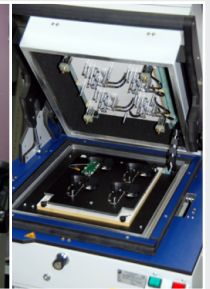
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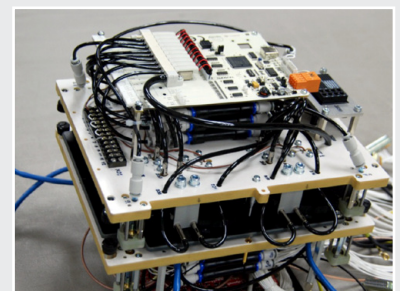Algocraft WN-PRG04A with relay barrier WN-REB04A

Test system platform

Test Fixture

Fixture's inner Faraday cage (where the WN-PRG04A is installed)

Faraday cage devices.
Thanks to 6TL's YAV technology, it was possible to include more than 10 actuators and its control inside the reduced volume available in the Faraday cage. See the programmer below the probe plate.