As your burn-in needs grow
FlexBID expands to meet them
Proven Burn-in Driver Technology
Used for over a decade by major semiconductor vendors, Accutron’s Burn-In driver (BID) technology is now available in a modular form - The FlexBID. Using a range of digital drivers and power supply control blocks a system can be easily configured which is suited both to your application and most importantly to your budget. And if your requirements become more demanding, unlike other driver systems the FlexBID can expand to meet those needs.

Hardware Overview
A FlexBID driver board is built using the following modules

1. 48 channel digital driver (-D48).
2. 16 channel analog driver (-A16).
3. Optional FlexBASE board to hold up to:
   - 8 x 48 channel drivers giving up to 384 synchroised digital driver channels
   - 1 x 16 channel analog cards
   - Optional power supply modules

The block diagram to the right and photograph below shows an example driver board with: 192 digital channels; 16 analog channels; integrated power supply control

1. The FlexBASE
A Personality Module (FlexBASE) is the base board for the driver system and it combines the various Flex modules into a working system. The FlexBASE connects to your burn-in chamber through standard edge connectors.

Features
- Option to add up to 8 Flex Digital Burn-In Driver Modules.
- Optional analog channels
- A 1Gb LAN is provided for the high speed download of Vectors.
- Connect up to 32 FlexBASE to build an expanded system.
- A FlexBASE can be built to suit your specific requirements, including customised electronics for those special applications.
**Flex Digital Burn-In Driver Module**

The digital driver module has 48 driver channels with on-board pattern memory and a high speed FPGA giving each module excellent performance.

**Features**

- 48 driver channels configurable as follows:
  - Dynamic stimulus and monitoring using deep pattern memory on all 48 channels.
  - Sign of life on all 48 channels.
  - Static I/O control and monitoring on all 48 channels.
- Drivers 0 - 10V; 100mA sink/source; programmable in groups of eight.
- Pattern memory: 4GB of high speed DDR3 on-board memory.
- Up to 20MHz operational speed.
- Vector Development: Auto-compare to expected; Call subroutine (nestable); Repeat N times; Jumps.
- Directly control 4 external bulk power supplies from each module.

**Analog Module**

Up to 16 analog channels can be optionally added to each FlexBASE.

- 100Hz to 20MHz
- ±18Vpp
- Programmable DC
- Drive Current 40 mA continuous per channel
- Programmable sine, square or sawtooth waveform

**Oven Integration**

Each FlexBASE uses industry standard Sullins edge connector footprint. All you need to integrate it to a new or existing BIB is a suitable feed-through board. We are happy to advise on the design of these.

**Power Supply Control**

Directly control 4 external bulk power supplies from each of the Flex Digital Burn-in Driver Modules.

0 - 10V on control outputs and +/- 12V on monitor inputs.
User Interface & Configuration

The main user interface gives a graphical representation of the oven, and shows all 64 BIB’s, drivers and power zones.

Digital Vector Programming

Burn-in and test vectors are created using a simple scripting language which has the following features:

- Commonly used vector sequences embedded in subroutines.
- A repeat function for the creation of loops.
- Errors logged and counted.

Creating and editing the burn-in recipe couldn’t be easier, and its all accomplished without a single line of coding.

Click on failed DUT in the main interface and a BIB map is displayed showing the failing DUT(s). A further click on this will get more detailed information on the failure.

And if you want to do something more complex than our GUI can offer, you can use the API to customise your own user interface.

Please Note: Details in this brochure are subject to change without notice so please contact your sales representative for any specification updates.