Eight new instructions for re-usable test:
- **INIT SETUP/INIT**: configure on-chip I/O & resources for test
- **CLAMP RELEASE/CLAMP**: Test Mode Persistence holds pins & isolates for in-situ on-chip tests
- **IC RESET**: Reset isolation and control in-situ on-chip tests
- **Test Mode Persistence**: holds pins & isolates for CLAMP_HOLD/CLAMP_RELEASE
- **ICID**: TAP
- **BOUNDARY REGISTER**: internal registers & mnemonics

BSIDL descriptions for IEEE 1500 architectures:
- reusable WSP descriptions in package files

**BSIDL attributes**
- for BIST/PLLs/SERDES IP blocks
- MNEMONICS for JTAG register values
- Easy to remember words start/stop, on/off
- REGISTER CONSTRAINTS: logical condition check throughout IC hierarchy
- SYSCLOCK CONFIGURATIONS
- initialization and on-chip IP clock requirements
- Hierarchical Package files for on-chip Test IP blocks
- self-contained definitions from IP providers
- PDL & TCL script files for device initialization/access
- Read/write hierarchical registers via Mnemonics
- New **<input spec>** for input pins
- Improve diagnostics, fault coverage, reduce noise