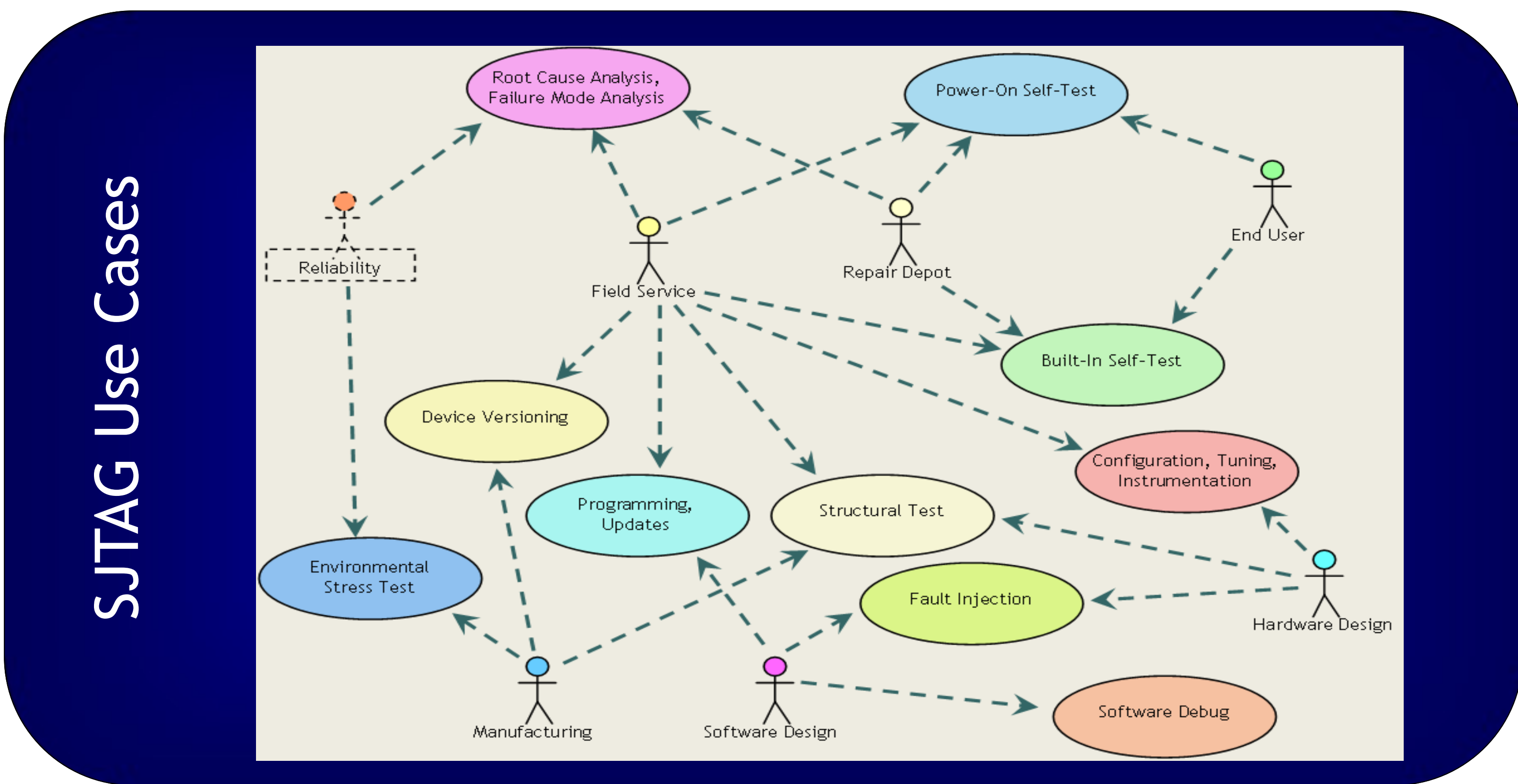


System Test Access Management

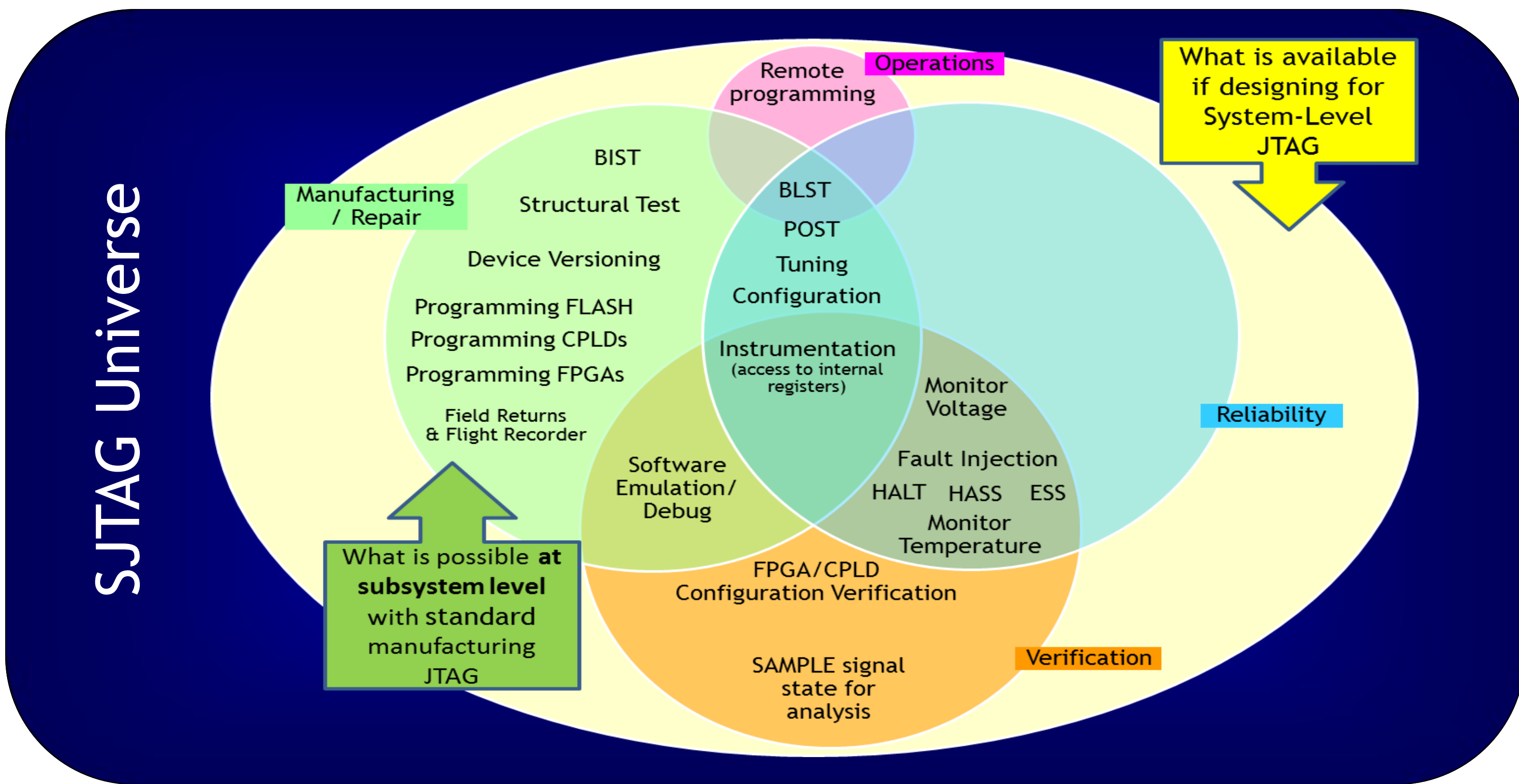


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System Definition

For the purposes of “System Test Access Management”, a system may be described as an organized collection of components or assemblies that are designed to operate together to perform one or more tasks or functions.



- Target Scenarios**
- ❖ System on Chip
 - ❖ Multi Chip Module
 - ❖ Embedded computer
 - ❖ Automatic Teller Machine
 - ❖ Telecom base station
 - ❖ Automobile
 - ❖ Home security system
 - ❖ Airplane autopilot
 - ❖ Data center
 - ❖ ...

- Concerns to Address**
- ❖ Access to target (system topology)
 - ❖ Data collection
 - ❖ Data Analysis
 - ❖ Diagnostics support
 - ❖ Hand-off to other standards
 - ❖ Test re-use through system hierarchy
 - ❖ Black-box vs White-box test



<http://www.sjtag.org/>

Draft Need

- ❖ Existing standards focus on component level only
- ❖ **Coordination** at board and system level is needed for effective leverage of existing and future component level standards
- ❖ A supervisory standard is required to define **Coordination** and dependencies of instruments, and the configuration, management, and application of tests at the board and system levels

Draft Purpose

- ❖ Seamless integration of component access topologies, interface constraints, and other dependencies at the board and system level
- ❖ Uniform **description** of **topology** and **behavior**
- ❖ **Coordination** of access topologies through a set of familiar, interchangeable interfaces
- ❖ Routing data sets to particular destination registers in the correct time order

Draft Scope

- ❖ Leverage existing test interface standards by defining a description to better manage how they are used in the system
- ❖ **Coordination** and control of device, board, and sub-system test interfaces to extend access to the system level

Participating Organisations:

ARM ❖ ASSET Intertech ❖ ATE Solutions ❖ Cadence Design Systems ❖ Cisco Systems ❖ Curtiss-Wright Controls ❖ Dell ❖ DFT Solutions ❖ Firecron Ltd. ❖ GOPEL Electronics ❖ Intel Corporation ❖ JTAG Technologies ❖ Keysight ❖ Leonardo MW Ltd. ❖ Marvell Inc. ❖ National Instruments ❖ NAVAIR Lakehurst ❖ Nokia ❖ Nvidia ❖ Schweitzer Engineering Laboratories, Inc. ❖ Via CPU Platform Inc.