CPU SS Validation – Slide 1/2

mirafra TECHNOLOGIES

CPU Core Validation

- Code execution and data access
 - From Different Memories
 - Different Exception Levels
 - Secure and Non-Secure Modes
 - Different Clock Sources
- Multi-Core Features
- Power down mode entry, exit and power measurement
- Exception Handling
- Timer Operation
- Security Aspects
- Debug Features
- Different Frequency-Voltage Plans
- Vmin and Fmax Analysis across PVT
- Interrupt Controller Validation
 - Interrupt Processing in Secure and Non-Secure Mode
 - Affinity routing
 - Supported Interrupts









T&M with ownership of deliverables

CPU SS Validation – Slide 2/2

mirafra TECHNOLOGIES

- Cache Memory Validation
 - Cacheable and Non-cacheable Access
 - Invalidate and Clean
 - Supported configurations
 - Supported Cache line sizes
 - Cache Policies Supported
 - Latency and Performance Measurement
 - Coherency validation
 - Operation as SRAM
- MMU Validation
 - Address Translation Level 1 and 2
 - Supported Page Table Formats and Page Sizes
 - Memory Attributes Access Permissions, Memory Type, Cache policies
 - Fault scenarios
 - Secure/Non-Secure Access
 - TLB invalidate and Flush





6 months



