

YOGITECH's eVerification Components (eVCs) are scalable, configurable, plug-and-play, pre-verified and extensible verification environments that can be readily integrated into your design. They maintain full compatibility with Verisity's Specman Elite test bench automation tool providing a solid basis in order to realize a complete, reliable and re-usable verification strategy increasing the verification team's productivity and the product's quality. Being **YOGITECH** in the Verification Alliance, its eVCs are interoperable with further releases of Verisity's Specman Elite, avoiding eventual work misalignments between verification teams and projects. **YOGITECH's** proven protocol expertise assures a high reliability of its eVCs that are all eReuse Methodology (eRM) compliant. **YOGITECH's** eVCs are exhaustively documented and tested. Through YOSS (**YOGITECH's** online support service), the company provides online support, documentation downloads, FAQ, examples and enquiries in a timely manner.

ATAPI 6 Host eVC

ATA standard specifies the AT Attachment Interface between host systems and storage devices. It provides a common attachment interface for system integrators, suppliers and manufacturers of intelligent storage devices. It includes the Packet Command feature known as the AT Attachment Packet Interface (ATAPI).

ATAPI 6 Host eVC is the most reliable solution in the market for the verification of ATAPI Device units. It is fully compatible with ATA/ATAPI 6 protocol and supports PIO, Multiword DMA and Ultra DMA timings. The highest level of abstraction is achieved using the embedded complete ATA/ATAPI 6 commands database. The detailed functional coverage measure is obtained by a complete built-in set of predefined coverage items. The eVC also embeds a powerful protocol-checker, fully adherent with ATA/ATAPI 6 specification. ATAPI 6 Host eVC includes a database of predefined sequences and an extensive test suite covering most of the possible scenarios.

Worldwide customers are using ATAPI 6 Host eVC in many verification environments both at module, and system level. This makes ATAPI 6 Host eVC the most reliable solution for the verification of ATAPI-based systems. ATAPI 6 Host eVC can be combined with ATAPI 6 Device eVC available in Yogitech's eVC catalogue to build a complete ATAPI 6 verification environment.

MAIN FEATURES

- _ ATA/ATAPI 6 protocol compatible.
- _ Layered architecture, verifies from low level to protocol flow.
- _ Supports PIO (0-4), MDMA (0-2) and UDMA (0-5) timings.
- _ Supports insertion of random or deterministic pauses and stops in DMA transactions.
- _ Supports PIO non data, PIO data in/out, DMA, Packet, Hardware/Software/Command reset and device diagnostic protocols.
- _ Built-in data and temporal assertions.
- _ Protocol Checker fully compatible with ATA 6 Spec.
- _ Functional Coverage Measure.
- _ Built-in set of predefined coverage items.
- _ Supports command interrupt and overwriting.
- _ Special low level commands to access device registers.

DELIVERABLES

- _ Core Files. eVC Inner Layer encrypted. eVC Upper Layer fully configurable by the user.
- _ Support Files. Predefined Sequence database featuring ATA/ATAPI 6 standard and special commands.
- _ Built-in ATA and Packet commands database.
- _ Sample and extensive tests covering basic functionality.
- _ Documentation. Comprehensive User Guide including Release Notes. FAQ.
- _ Online Support Service. Fast bug fixing. General problem solving. Direct interaction with the product's development team.
- _ Training on demand.

ATAPI 6 Host eVC

eVC Architecture

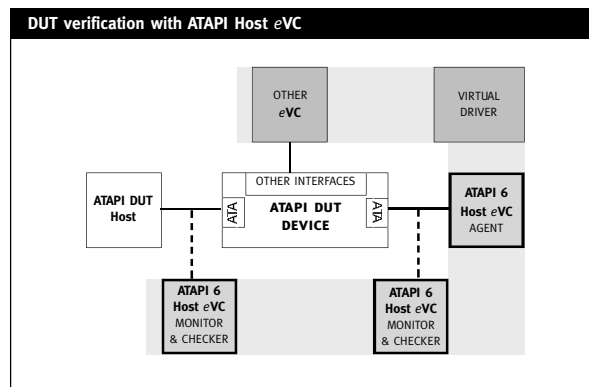
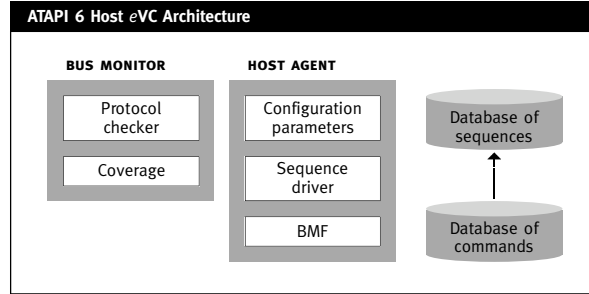
ATAPI 6 Host eVC provides much more than a simple BFM. It is an eRM verification component composed by an ATAPI Host agent capable of generating and driving the full set of ATA commands using all possible timings. Each command can be customized by the user in order to create particular scenarios. ATAPI 6 Host eVC includes a monitor that logs all traffic information and collects items for test functional coverage. The embedded protocol checker is a runtime tool checking ATA/ATAPI rules of the current bus traffic. If any wrong condition is detected during the simulation the checker prompts the error and prints a message describing the violation.

eVC Usage

ATAPI 6 Host eVC can be used to verify ATAPI Devices at module-level and in complex top-level verification environments. In fact, ATAPI 6 Host eVC is easily configurable due to its comprehensive top-level structure and can initiate and react to the traffic from an ATAPI Device controller DUT. The monitor and protocol checker can be used to verify the protocol compatibility and to collect data for logging and performance analysis. The eRM compliance assures that multiple instances of verification components can be effectively managed by a top level virtual sequence driver that can generate and control all the different possible verification scenarios.

Licensing

Yogitech's eVCs are distributed with a simple floating license which allows for multiple eVCs instantiations. Each Specman Elite license requires a separate eVC licence.



The product described in this document is subject to continuous development and improvements. Software licenses are subject to availability. Yogitech reserves the rights to make any changes in this document and related product in any time without prior notice. No responsibility is accepted for errors or omissions.