S2U15: Surveillance Video Appliance

This 2u, short-depth hybrid video appliance is made for security/surveillance applications. It can function in desktop or rackmount configurations. Flexible storage capacity. Room for additional COTS or customer cards. Serves as a versatile platform for leading edge video analytics solutions.

Performance Characteristics:

Support for Intel[®] Celeron[™] through the latest Intel processors, up to four PCI Express devices, and two 2.5" or 3.5" removable drives.

Ergonomics:

Excellent front-to-rear airflow, compatible with most racks. Available with custom branding and optional rack/rail kit. Overall dimensions: 17" (432mm) W x 12" (305mm) D x 3.5" (89mm) H.

Lifecycle:

Seven year availability.



EmbedTek designs, invents, and manufactures computers, software, sensors, cameras, and displays for original equipment manufacturers. Our systems improve the quality of imaging in healthcare, simulation programs in the military, video analytics in security, and much more. Throw any challenge at us, from demanding environment and ergonomic requirements to High Level Assembly and nonstandard I/O. We'll evaluate it, carefully attack it, and solve it.

Product Realization: S2U15



A manufacturer of security/surveillance equipment uses this device as the workhorse appliance for a full line of video analytics solutions. By providing Bill of Materials integrity through the projected end-of-life, they are able to reliably incorporate custom I/O operability for alarm triggers.

Overall challenge:

Provide a single platform for multiple configurations of a hybrid video recorder/analyzer, one that could accommodate a combination of future upgrade paths as well as legacy cards.

Design:

We worked with the customer at an intersection of software feature updates and planned new product introduction. The flexible hardware solution consolidated multiple platforms, accelerating time-to-market for both current and future configurations. By working closely with the customer's development team, we were able to address critical software requirements as well as the need to incorporate an I/O card used for alarm triggers.

We provided a device that was quiet enough for desktop use, but provided good thermals for rackmount installation. The chassis accommodated a variety of different video capture cards for a mix of analog and digital inputs, plus the opportunity to incorporate RAID or JBOD disk configurations. The metalwork allowed for custom branding.

Prototypes & Validation:

Initial prototypes were created in less than four weeks for software validation.

Launch:

Flexible test fixture was created prior to launch, configured to complement all the different product configurations. That meant every system could be tested right in the production facility as the end product would be used in the field; addressing any gaps in test vs how the end customer would use the product.

Production, End-of-Life:

Product is designed to be tested and validated at EmbedTek, and shipped directly to the end-user using custom shipping.

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