

Advanced 1553/ARINC Application Program Interface (API) Support Package: *AltaAPI*[™]

Alta's 1553 and ARINC products come standard with the most advanced Application Program
Interface (API) in the avionics industry. *AltaAPI*, provides a layered, modular software tool kit for fast and efficient application development – usually a code reduction exercise from other vendors.
The API architecture is extremely flexible for easy porting between various operating systems, such as VxWorks 5.X/6.X/7.X MILS (non RTP), Integrity, LynxOS RTOS, 32/64 Linux, Solaris 10, NI LabVIEW™, RTX Shared/Windows and 32/64 Windows XP/2003/Vista/07/08/8.1/10.

AltaAPI Architechture Key Features of AltaAPI Layer 3 Module Layered Design to Maximize a Flexible Windows GUI Analyzer and Quick Integration (.NET 2.0 C#) Most Popular OS Environments Including 32/64 Linux 32/64, 32/64 Laver 2 Modules Laver 2 Module Windows XP/2003/Vista/07/08/8.1/10 for Microsoft Visual Studio 2005 for Other - i.e. Future Native and Solaris. .NET 2.0: C++, C#, VB, etc. ADA or LabVIEW RTOS support for VxWorks, Integrity, • Lynx OS, RTX Windows/Shared Mode. Layer 1 API Module Windows Managed .NET 2.0 DLLs (ANSI C) Provides Quick Integration with Visual General Operations and Device Management Basic, .Net, C++, etc... **OS-Specific Layer 0 API Module** Key ANSI C Layer 1 with source code provides easy integration and porting -(ANSI C) over 80 example programs to jump **OS-Specific Device Driver** start your application (regardless of OS). Backplane (PCI, PCIe, etc.) Same API Used for Multiple Protocols (1553 and ARINC). Alta Interface Card • Easily port from other avionics vendors to AltaAPI – Porting Guides Provided. See AltaAPI-LV[™] for LabVIEW[™] support. Layer 0 (Low Level – OS Specific) API Model ANSI C Layer 0 (zero) of the API is where all OS Interrupt Memory dependencies reside. This layer is kept Memory Handler Mapping as simple as possible to make the API Read and Attach and Write and as portable as possible. This is an ANSI Unmapping Detach C layer and source code, when possible, is provided. In most cases the user **OS-Specific Device Driver** never needs to interface to the Layer 0 files unless special porting is required. Backplane (PCI, PCIe, etc.) Alta Interface Card

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