



Nakra Labs Inc. is **THE** premier provider of Standards Compliant Carrier Grade software for Networking/Communications Applications. Nakra Labs *Accelerator* Suite of “off the shelf,” powerful software products enables users to rapidly design and deploy their Networking/Communications systems, saving significant amount of time, effort, and money.

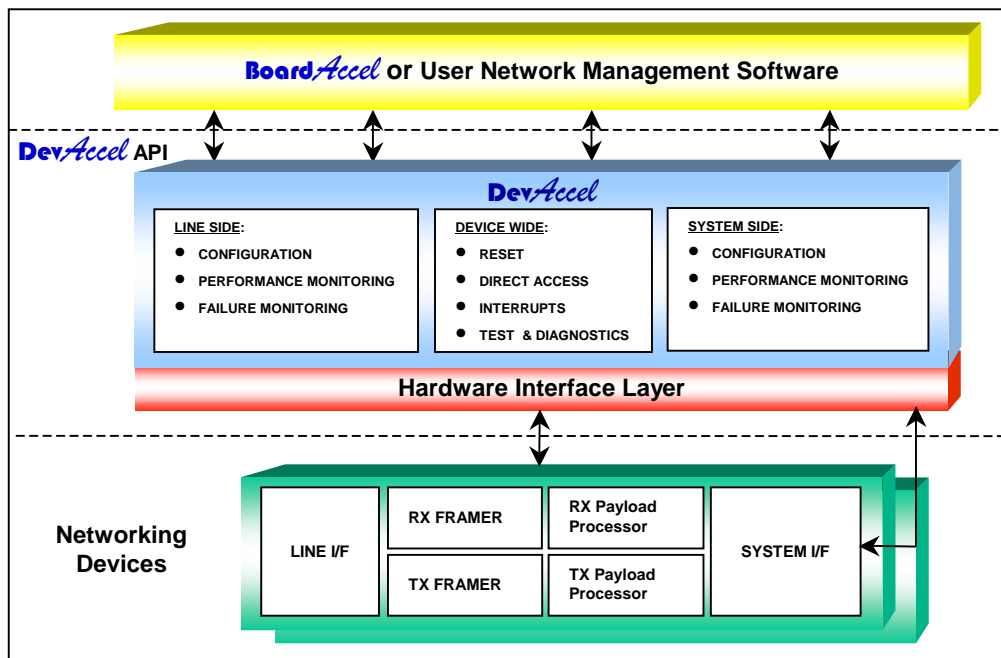
The *NUAccelerator* Suite helps overcome major issues that users commonly face by:

- Lowering Cost
- Providing ROBUST software with significantly lower field failure rates
- Shrinking Design Times and Time-to-Market
- Overcoming the Increasing Complexity of Standards based Protocols and newer ASSP Devices
- Helping users cope with shrinking Design Team sizes

The Device Accelerator or *DevAccel* line of products forms the lowest layer of the *NUAccelerator* Suite of embedded software products, residing between the devices and the *BoardAccel* layer. *DevAccel* provides an easy to use, abstracted mechanism to control and monitor complex networking devices. This layer of software alleviates the system developer from the need to master the intricacies of the networking chips that are being used and frees up the developer to focus on the higher layer differentiating features of the system.

The *DevAccel* suite spans Framers, Switch Fabrics and Network Processors. The package is fully tested and provides **90%** of the Network Element software functionality necessary to control and monitor the devices. Due to the ease of use and abstracted control of the devices, the *DevAccel* package typically can be integrated into the User’s system and facilitating data traffic through the system in a matter of hours; saving **4 to 6 months** of design and test effort (**8 to 10 months** if used in tandem with the *SimAccel* product line).

*DevAccel* is protocol independent, allowing for easy migration of user’s application layer from one device to the next (either within the same family or to the next generation family of products). Due to the uniform API containing only 13 commands (shallow learning curve!), users can re-use a significant portion (up to **90%**) of the Application layer software thereby saving even more time, effort and money.



DevAccel™ - A Nakra Labs Technology

**DevAccel** functionality includes:

- Abstracted Device Initialization and Dynamic Re-Configuration without traffic disruption
- Standards compliant Performance Monitoring
- Standards compliant Failure Monitoring
- Interrupt Support
- Hooks for Automatic Protection Switching
- Maintaining all device-specific data structures
- Serialization (for Hot-swapping/Warm boot operations)
- Device specific Diagnostics
- Modular Code Base (users can choose the modules/functions that are needed)

The **DevAccel** product line empowers the user to easily control devices implementing the following protocols:

- SONET
- SDH
- Digital Wrapper/FEC
- LCAS
- GFP
- ATM
- POS
- DS0, DS1 (T1)/J1, DS2, DS3 (T3)
- E1, E3
- VT
- GigE, 10GigE

**DevAccel** Salient Features:

- Available 2 to 3 months prior to first silicon availability, facilitating software development in tandem with hardware design
- Performs 100% of the Device Configuration in any mode that device supports
- Provides COMPLETE access to all the device registers – accessed by field name
- Provides 90% of the necessary Network Element software for the device
- Qualified on equipment shipping to Carriers such as AT&T, NTT, Global Crossing
- Seamless migration due to Common API
- Common API across all devices. (Only 13 API calls)
- Automatically accounts for newer Silicon revisions
- Shallow learning curve
- Modular Code
- Easy adaptation into host environment (OS independent)
- Device configuration and usage is highly abstracted
- Offers exhaustive documentation with example code
- Fully tested and validated
- Flexible driver architecture
- Provides for simple integration of software updates.

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