DPX® Platform Software Overview

A comprehensive software stack for DPX gaming platforms

Core Platform Software Components

DPX Core SDK
- Hardware abstraction layer providing controlled access to gaming platform hardware resources

DPX Connector SDK
- Integration library enabling application software to interface with gaming peripherals

DPX Diagnostics
- Platform validation environment supporting hardware verification, system testing, and diagnostics

DPX Gaming Platform Security Architecture (GPSA)
- Application-level software supporting platform services and system-level functionality for OEM integration

DPX Media Validation Toolkit (MVTK)
- Firmware-level validation tool ensuring integrity of operating system and game media prior to execution (available separately; additional fees apply)

DPX SAS Connector SDK
- Protocol library enabling communication with casino host systems via SAS (available separately; additional fees apply)

Windows Linux

Introduction

The DPX Platform Software portfolio provides a comprehensive software stack for OEM development on DPX gaming platforms. It includes core platform APIs alongside additional components for validation, connectivity, diagnostics, and deployment support developed through long-term customer engagement.

Designed for OEM development with specific support for regulated gaming environments, the portfolio supports reliable system operation, long lifecycle management, and controlled integration across supported DPX platforms.

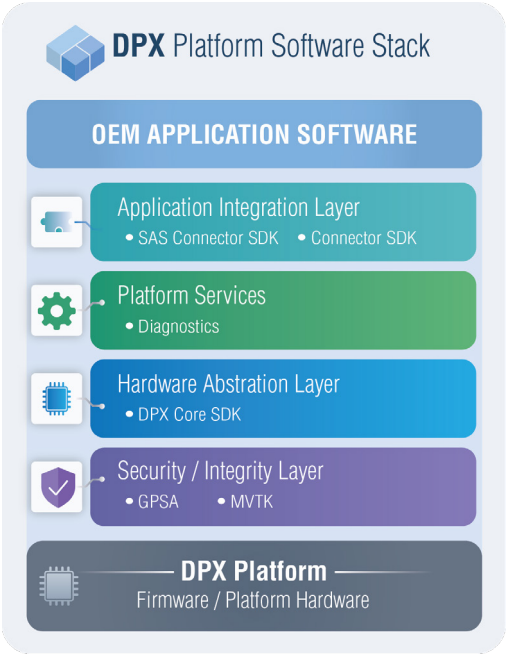
Architecture & Capabilities

The DPX Platform Software portfolio follows a layered structure spanning hardware access, device integration, platform services, and application-level functionality.

Key architectural characteristics include:
- Controlled access to platform hardware resources
- Structured API interfaces for OEM application integration
- Firmware-level system integrity enforcement
- Support for gaming peripheral integration
- Communication frameworks for host system connectivity
- Platform validation and diagnostics capabilities

System trust is established at firmware level and extends through platform initialization to application execution.

This structure enables OEM developers to build gaming systems with consistent platform behaviour across development, certification, and production environments



Core Platform Software Components

The DPX Platform Software portfolio is organised into functional areas supporting OEM development across hardware integration, system connectivity, and platform assurance.

At its foundation, DPX Core SDK provides interfaces for accessing DPX gaming-specific hardware resources and embedded controller functions, enabling system-level integration and platform control.

DPX Connector SDK and DPX SAS Connector SDK provide connectivity with gaming peripherals and casino host systems respectively, supporting integration with the wider operational environment.

DPX Diagnostics, MVTK, and GPSA provide platform assurance and operational support through system validation, media integrity checking, troubleshooting, and security capabilities across development, production, and deployment.

Detailed information on each component is provided in its dedicated datasheet.

Package Contents

DPX Platform Software packages typically include:	Documentation and datasheets for DPX software components
	SDK libraries and development resources (where applicable)
	Sample source code and integration examples

System Requirements

Development Environment	Supported Windows and Linux operating systems aligned with the selected DPX platform
	Standard OEM development toolchains
	C/C++/C# integration support (where applicable)
Target Platform	Supported DPX Series motherboard or integrated system

Integration & Compatibility

The DPX Platform Software portfolio operates across supported DPX gaming platforms, providing consistent API behaviour across platform generations
Components integrate with platform firmware, hardware abstraction layers, and application-level software within supported system configurations
The structured design supports OEM adoption of required components in line with system design and certification requirements

Benefits

Provides a complete software stack for DPX platform development
Enables controlled access to gaming platform hardware resources
Supports integration of gaming peripherals and host communication protocols
Enables platform validation, diagnostics, and system assurance across development and deployment lifecycles
Supports firmware-level system integrity and trusted platform functions
Maintains consistency across long lifecycle DPX gaming deployments

OEM Customization and Product Development

Advantech Gaming Solutions provides PC-based hardware and software design services for regulated gaming applications, supporting customized platform development and long-term product lifecycle management.