Key Technologies

Modular Multi-Mode LED Backlight
- Maximum efficiency
- Stabilized light output over temperature and life-time of display
- Stabilized color output over temperature and life-time of display
- Night vision options for Class A and Class B

Safety Critical Multi-Touch Technology
- Projective Capacitive Technology with health monitoring
- Optional adaptive force detection for critical functions
- Real multi-touch
- No wear-out

MOSArt™ Open System Architecture
The MOSArt™ platform can host multiple applications with potential different DAL levels onto one processing platform. In addition, you can assign different critically levels to each MOSArt™ partition. As a software platform, MOSArt™ drives down the total cost of ownership (TCO) and strongly increases the mean time between failures (MTBF) by combining different functions onto one HW platform. This stability is of critical importance to the performance of a cockpit’s visual system. It comes with a complete certification package up to DO-178B/C Level A, encapsulating the RTOS’s certification artifacts and clearly marking what tasks the final software integrator will need to perform.

- Shortened development cycle
- Reduced certification risk
- Flexible allocation of development resources

Applications
- Primary Flight Display
- Synthetic Vision System
- Enhanced Vision System
- Digital Map
- Netstack API layer
- Hardware drivers
- MIL-STD 1553
- Arinc 825
- Mass storage
- AFDX
- Discrete IOs
- Arinc 708/453
- Analog & digital video
- Arinc 429
- Ethernet 10/100/1000
- Monitoring
- Arinc653 compliant RTOS
- Built-in test
- Data distribution system
- API layer
- Multi-core processing
- Video Windowing
- OpenGL
- ...
DISPLAY SOLUTIONS

VIDEO DISPLAYS

YOUR VIDEO STREAMS VISUALIZED WITH THE HIGHEST QUALITY UNDER ALL CONDITIONS. Our family of video displays consists of products that display one or multiple video streams of the highest quality, with Design Assurance Level up to DAL A, and under stringent environmental conditions. Our video displays form the ideal front-end for Part 23, Part 25, Part 27 and Part 29 electronic flight instrument or mission systems.

- Process up to 8 analog and digital inputs
- HD-SDI (SMPTE-292M) and ARINC 818 support
- Scaling, Rotation, Cropping, Picture In Picture (PiP), Picture by Picture (PbyP)

SMART DISPLAYS — CRT TO LCD UPGRADE

LOWER MAINTENANCE COSTS, MORE FUNCTIONALITY. Our innovative CRT to LCD display upgrades are designed to drive down maintenance costs over legacy CRT displays while eliminating the threat of obsolescence associated with old CRT technology, lowering the installed weight and reducing the overall power consumption.

Generally, our display upgrades replicate the functionality of the CRT while providing significant increases in reliability. Quick conversions are achieved by keeping the existing main instrument panel, aircraft harnesses and symbol generators, minimizing the aircraft downtime required for the display upgrade and disruptions to aircraft operations.

Our displays have built-in provisions to add functional capabilities over time, functionality that can no longer be integrated with legacy CRT displays.

Our display solution is part of the Honeywell Primus Elite upgrade program. This display solution provides a form, fit and functional replacement to the aging CRTs installed on a host of business aircraft. When properly enabled, these displays can provide a new PFD with Synthetic Vision System and enhanced navigation displays with advanced features such as the overlay of graphical weather, a viewer for Jeppesen charts, the display of video from on-board cameras, etc.

MODULES & CONTROL ASSEMBLIES

THE MOST RELIABLE INTERFACE TO YOUR SYSTEMS. Our modules and control assemblies consist of a variety of products whose main purpose is to control or to provide inputs to one or more aircraft sub-systems. They form a key interface between the aircraft systems and the pilots.

The control assemblies vary in complexity, from the simpler switch panel sub-assemblies to complete Line Replaceable Units (LRUs) that incorporate required processing capabilities to interface with the aircraft systems and provide control and visual feedback to the operator.

At the top end of our line of control assemblies is the Cockpit Display Management System equipped with the MOSArt™ middleware, which allows customers to develop and integrate their own applications on flexible platforms.

Our next-generation in control displays feature a full-size, safety critical multi-touch screen. This interface enables a new range of intuitive means to interact with aircraft systems, while retaining compliance to the safety requirements of the customer’s environment.

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MULTI-FUNCTION SMART DISPLAYS

The MFD-3000 series is our 3rd generation of Smart Displays. Our range of smart display products combines superb optical quality with a high-performance multi-core processing capability, sweet-spot graphics performance and a vast set of interfacing options. Equipped with the ARINC 653 compliant MOSArt™ platform services, these displays are capable of hosting multiple, high-demanding software applications developed to varying Design Assurance Levels, up to and including DAL A.

Depending on the application and installation requirements, various sizes, input formats, interfacing and HMI options are available.

- Certification artifacts to DO-178B/C and DO-254 to Design Assurance Level (DAL) A
- Multi-core processing equipped with the MOSArt™ ARINC 653 compliant platform services
- RTOS support for Green Hills Software Integrity-178B tUMP and Windriver Vxworks653
- Sweet-spot graphics processing, perfectly balancing performance and power consumption
Key Technologies

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