

EC2007 ECDIS Kernel

PRODUCT DESCRIPTION

The EC2007 ECDIS Kernel is a software development kit (SDK) that assists OEMs to develop a wide range of marine chart display applications, such as, ECDIS, WECDIS, VTS,

InlandECDIS, ECS, and tactical consoles.

With over 50.000 run-time licences sold, the EC2007 ECDIS Kernel is a stable and proven solution. Its use not only reduces OEM product development cost and risk significantly, but also drastically reduces the risk and effort associated with keeping up-to-date with complex chart display standards.

The reliability of EC2007 ECDIS Kernel, combined with specialist support for many different military chart products, as well as support for a wide variety of operating systems, makes the Kernel not only the first choice for civil applications, but also the perfect choice for military chart display applications, such as, WECDIS and tactical command and control.

For rapid software development environments the EC2007 ECDIS Kernel is also available with the SharpCoat .NET SDK wrapper.

PRODUCT HIGHLIGHTS

- Over 1000 functions for chart display, chart handling, and navigation
- Integrated in many type-approved ECDIS applications
- Prefilled with SevenCs own small scale world data set
- Constantly updated to reflect the latest chart display standards
- Available for Windows, Linux and Solaris
- Low entry development and run-time software licenses



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FUNCTIONAL OVERVIEW

Typical Applications

The EC2007 ECDIS Kernel is not just for type approved ECDIS and InlandECDIS applications but also for many other military, civil and offshore applications, such as:

- → WECDIS, ECDIS-N
- Naval Combat Systems
- Vessel Traffic Service (VTS)
- Harbour and Coastal Surveillance
- Training and Simulation Systems
- Search and Rescue (SAR)

Supported Functionality

The EC2007 ECDIS Kernel supports a wide range of core functions for:

- Chart Handling (loading, decryption, updating)
- Chart Display (automated chart selection depending on position and scale)
- Chart Object Handling (creation, manipulation, querying)
- Sensor Handling (NMEA, AIS, ARPA) ¹
- Routing (planning, calculation, monitoring, recording)
- Guard zone definition and prediction
- Navigational calculations for clearing lines, electronic bearing lines (EBL) etc.
- 3D Display of ENC, DTED and BAG data ^{1,2}

Supported Operating Systems

- Windows XP, Vista, 7
- SUSE Enterprise 10
- openSUSE 11
- Red Hat 5
- Solaris 10 (Sun OS 5.10)

Supported Chart Products ³

The EC2007 ECDIS Kernel supports a wide range of vector and raster chart product, such as:

- Electronic Navigational Chart (ENC)
- Inland ENC (IENC)
- Port ENC (PENC)
- Bathymetric ENC (bENC)
- Admiralty Information Overlay (AIO)
- Additional Military Layer (AML)
- Digital Nautical Charts (DNC)
- → Tactical Ocean Data (TOD) Level 0,1,2,4
- Vector Map (VMap) Level 0, 1
- Admiralty Raster Charts Service (ARCS)
- NOAA Raster Chart (BSB)

Supported Standards ³

The EC2007 ECDIS Kernel meets chart display aspects of the following standards:

- → IMO Performance Standards
- → IEC 61174 and 62288
- → IHO S-57, S-52 and S-63
- EU InlandECDIS Standard
- → STANAG 4564 (WECDIS)
- STANAG 7170 (AML)
- MIL-2407 (VPF)
- MIL-89045 (GeoSym)
- → MIL-89049 (TOD)
- MIL-89033/39 (VMap)



- ${\bf 1}$ not available for SharpCoat .NET SDK
- 2 only available for Windows OS
- $\ensuremath{\mathtt{3}}$ subject to change please confirm the latest versions