

# Company Profile

Windows/CE Expertise

**GRACE System Technology Labs  
(India) Pvt. Ltd.**

*Technology Centric, Value Driven*

# Expertise on Windows/CE

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Over the past few years we have been involved in many exciting Windows Desktop and Windows CE based projects.

Some of the Projects in which our Associates have been involved are listed below:

# Windows/CE –Wireless Related

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- Porting of Windows CE BSP for S3C24A0A to Windows Mobile 6.0 – The work involved modifications to the Ethernet Boot loader, development of the IPL and Configuring the Windows Mobile Image for the Image Update Model.
- Debugging of the Serial, USB Serial Driver and debugging the audio driver on Windows Mobile 6.0 for the S3C24A0A.
- Windows driver and related software for Wireless data card.

# Windows/CE – WLAN/WIMAX/SECURITY RELATED

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- Enhancements/Bug fixing for WHQL certification of 802.11 a/b/ g chipset driver on Windows.
- Windows CE device drivers for Atheros USB WLAN chipset.
- Windows CE device drivers for Atheros CF WLAN chipset
- Windows CE device drivers for Atheros SDIO WLAN chipset
- Windows device driver for PCMCIA/CF 802.16/WIMAX device with support for firmware download, ARP spoofing , IP mode/Ethernet mode operation and connection management.
- Support for Quality of service in the form of priority queues and Leaky bucket algorithm.
- 802.1x/EAP/AKA supplicant protocol on Windows for WIMAX device
- Windows device driver for USB 802.16/WIMAX device.
- ROHC header compression protocol software along with WIMAX driver
- WLAN WMM (Cisco CCX version 3) implementation on WinCE

# Windows/CE –WLAN/WIMAX/SECURITY *RELATED*

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- Design and implementation of Wireless LAN driver and protocol for PCI based PRISM chipset on Linux and Windows. It implements a basic host based Access point based on PRISM chipset.
- Design and implementation of USB Wireless LAN driver for Linux, Windows and Windows CE.
- Development of File system filter driver for encryption on Windows 2003
- Development of an NDIS intermediate filter driver that would block/unblock packets for WLAN device when an Ethernet device is connected/disconnected.
- WinCE WLAN SDIO driver for WLAN IP evaluation board.
- USB WLAN driver for the ZD1211 device on WinCE
- Design and implementation of Nucleus driver and protocol modules (802.1x, WPA, WMM) for Ralink USB WLAN chipset.
- Windows SDIO WLAN driver development
- Configuration utility for WLAN on WinCE

# Windows/CE –Storage Related

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- Converted legacy SAN device windows drivers to PnP drivers
- Driver support for handling multiple SAN devices
- Windows Bus driver to enumerate multiple Drivers for the same SAN device.
- Linux to Windows Drivers porting, feature addition, bug fixing and support.
- Windows drivers,Library,applications feature addition, bug Fixes and support for Storage Processor Platform.
- Virtual serial driver on Windows/Linux.
- Bug fixes for FC and Virtualization drivers.

# Windows/CE – Storage Related

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- FC port Manager API implementation.
- Production level Diagnostics and Multi card/HBA test platform interface software/firmware development for NIC and FC HBAs.
- Windows NDIS 6.0 Mini port Driver for Vista and Longhorn (Server 2008). This driver would be further developed to support Virtualization of NIC in hyper visor environment.
- Flash related drivers and utility development on Windows
- Building test bench for flash and file system testing on WinCE.

# Windows/CE – USB related

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- USB Ethernet driver for Linux, Windows and Windows CE.
- USB Wireless LAN driver for Linux, Windows and Windows CE.
- USB/Serial Touch screen driver on Windows/Windows CE.
- USB Function driver and USB based boot loader on Windows CE.
- USB device driver for WIMAX CPEs on Windows
- USB device driver for Test and Measurement device on Windows
- USB device driver for dental imaging device on Windows
- USB device drivers and function drivers for CDC ACM and 3G-PP Multiplexer protocol for Virtual serial ports over USB on Windows, Apple MAC, VxWorks and Linux
- USB host controller driver on WinCe for Philips ISP1161
- USB printer port driver for non class based printer on Windows.
- USB filter driver to simulate USB device and HID function driver on Windows.
- Embedded device side software and Windows Host driver for USB connectivity for an Audio device.
- USB filter driver on Windows for remote USB.

# Windows/CE – USB related

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- USB firmware and corresponding Windows driver for USB interface support for WLAN device.
- Design and implementation of Nucleus driver and protocol modules (802.1x, WPA, WMM) for Ralink USB WLAN chipset.
- Design and implementation of Windows driver and protocol modules (802.1x, WPA, WMM) for Ralink USB WLAN chipset.

# Windows/CE – On Media Related Boards

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- Wince 6.0 drivers on TMS320DM6446 based board. This involved :
  - ❖ OnChip USB Host Controller Driver
  - ❖ USB WLAN Driver for the ZD1211 device
- WinCe 5.0 SDIO driver and config utility for WLAN chipset
- creation of device driver abstraction layer, Integration and testing of different decoder and encoder on Texas -TMS320DM6446 based platform for WinCE 6.0
- Application for playing media files in the target board
- Audio Support and Video Encoder Driver, SDRAM test on Texas -TMS320DM6446

# Windows/CE –On Media Related Boards

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- Performance upgrade of Flash & Implementation of Hive based registry onto it for WinCE 6.0 on Texas -TMS320DM6446 based platform.
- WinCE BSP porting from Sfumato on Texas -TMS320DM6441 based Davinci board
- Development of Buffer Flush & Frame Drop features in HAL of QV1721
- Development of AP-Client support for RT-73 Wireless chipset on ST Board
- Development of virtual display driver for ST Mobile2Display board
- Enhancements for flash driver & utility for ST M2D board

# Windows/CE —*OTHER DEVICE DRIVERS*

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- PCI Express Root Complex Validation Driver/Software on Windows
- Flash driver on Windows CE.
- Serial and display driver on Windows CE.
- Windows and Linux network driver for 10/100Mbps Ethernet chipsets (PCI).
- Gigabit Ethernet driver on Windows 95, 98, NT, 2K, ME, Linux, Solaris, Netware, UnixWare, SCO Open server, VxWorks.

## Windows/CE —*OTHER DEVICE DRIVERS*

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- Device driver for storage virtualization device on Windows/Linux.
- SCSI miniport driver on Windows.
- Storage filter driver on Windows.
- 3GPP TE-UE Multiplexer protocol intermediate driver to Windows 2000.
- Windows File System Filter driver for compression
- Windows printer driver for conversion into BMP, EMF and EPS formats.
- Windows device driver for compression accelerator device.

# Windows/CE —*OTHER DEVICE DRIVERS*

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- Windows File System driver for Compression
- Virtual Serial Port driver on Windows
- Video Mirror driver on Windows
- Development of File system filter driver for encryption
- WinCe device driver for GPS device
- WinCe device driver for blue tooth device
- Pseudo Webcam driver for desktop image reproduction
- SATA driver on WinCE

# Windows/CE —*PROTOCOLS RELATED*

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- Design and Development of Link aggregation control protocol module (IEEE 802.3ad) on Windows 9X, NT, 2K, ME, Linux, Solaris, UnixWare.
- Design and implementation of PPPoE protocol intermediate driver for Windows 98/2000/95.
- Design and Implementation of iSCSI protocol stack on Windows and Linux.
- Design and Implementation of PHS protocol

# Windows/CE —*PROTOCOLS RELATED*

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- Design and implementation of LACP protocol on Windows and Linux.
- Porting of 3GPP TE-UE Multiplexer protocol intermediate driver to Windows 2000.
- ROHC stack on Windows

# Windows/CE —*OPERATING SYSTEM RELATED*

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- Porting of WinCE/Writing WinCE BSP for Intel XSCALE based board for Electronic Voting machine.
- Porting of WinCE/Writing WinCE BSP for Intel XSCALE based board for testing Equipment.
- Writing WinCE BSP to support Hitachi SH7727 based traffic signal controller.
- Windows File System Filter driver for compression
- Windows File System Driver for backup.

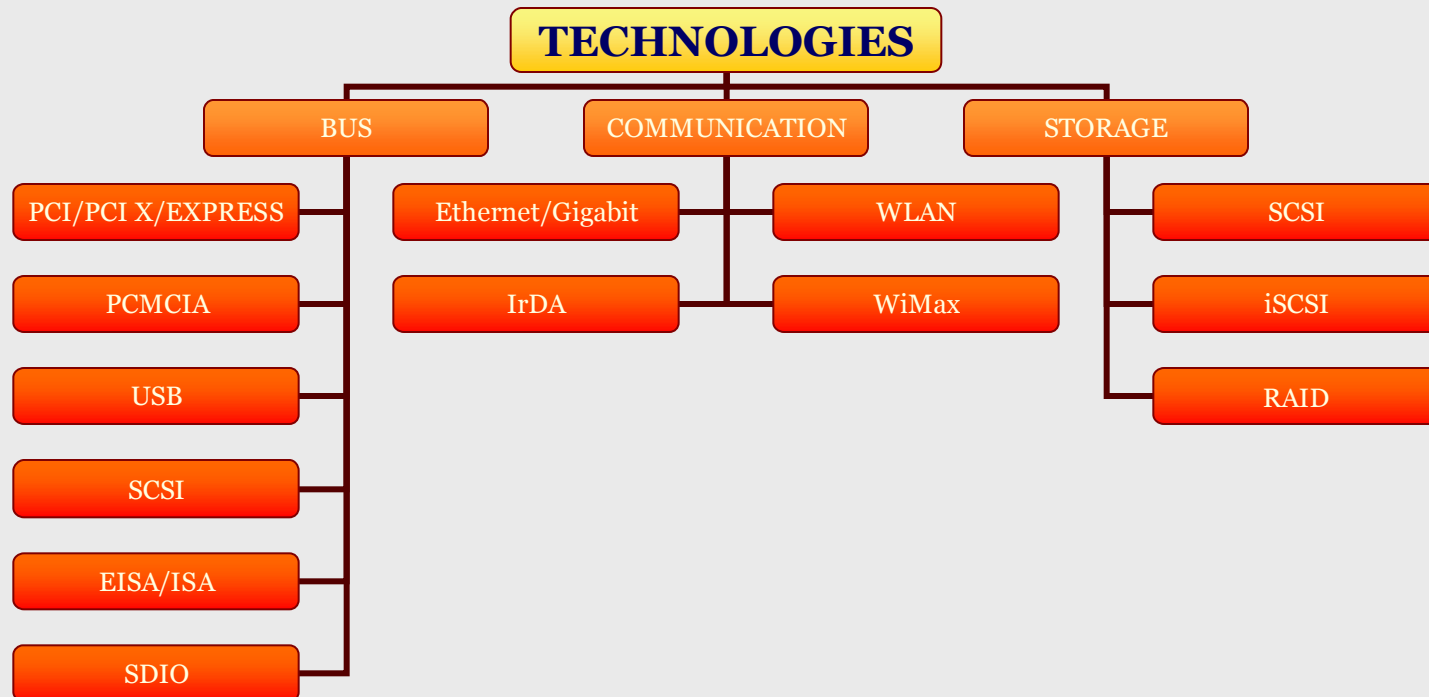
# Case Studies

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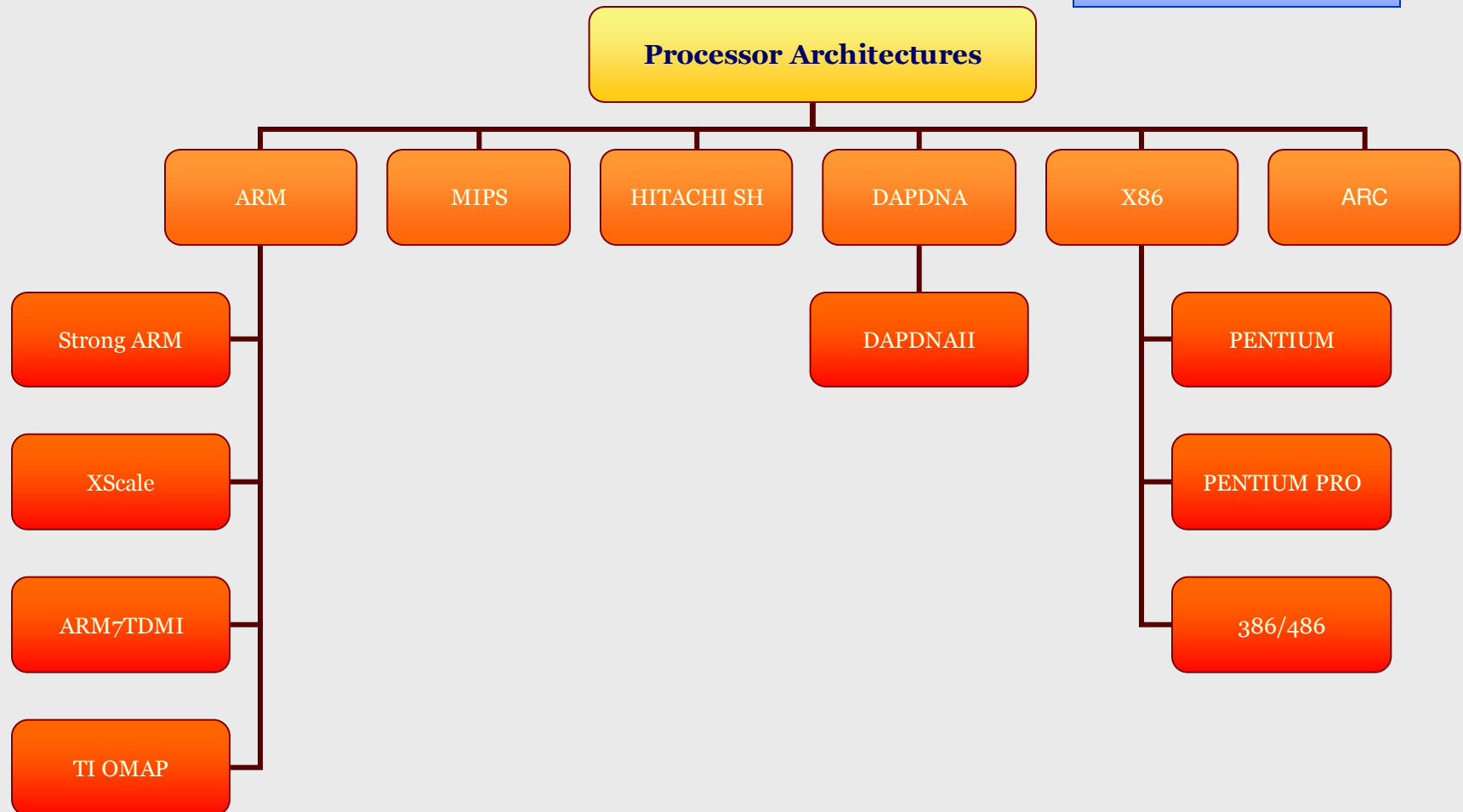
For case studies please visit :

**[www.gracelabs.com/case\\_study.html](http://www.gracelabs.com/case_study.html)**

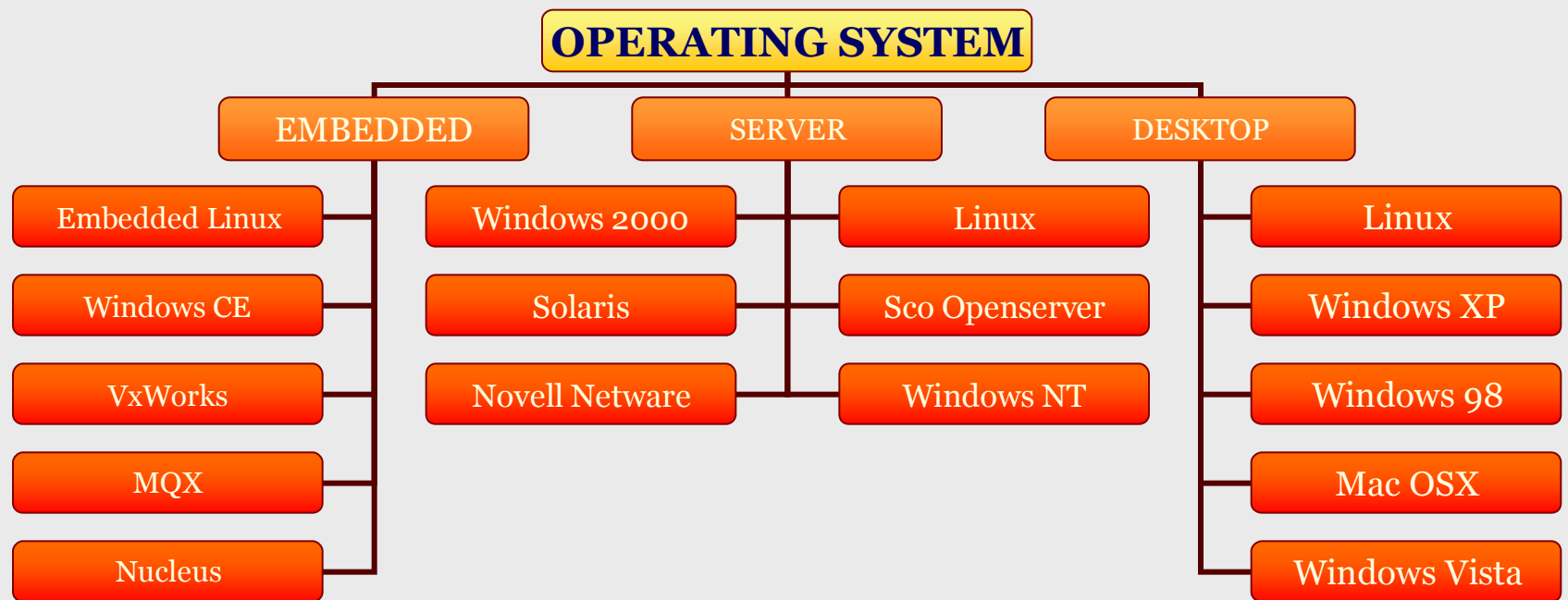
# Domain Expertise – *TECHNOLOGIES*



# Domain Expertise – ARCHITECTURES



# Domain Expertise – *OPERATING SYSTEMS*



# Contact Info

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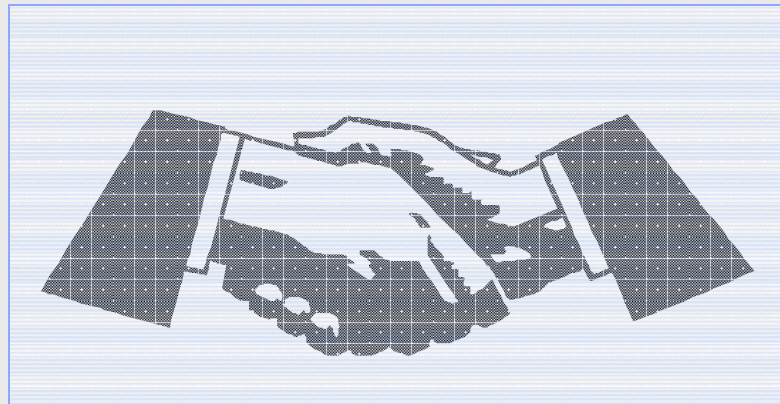
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***Looking Forward to a mutually  
Beneficial relationship...***



**THANK YOU**