



Windows XP Embedded BSP for MSMST

Release notes for BSP R1.00

1 Revision History

Revision	Date	Author	Description
1.00	10/02/2011	Andrey Shitov, Reviewed and approved: Gennady Kuznetsov	Release notes for XPE BSP prototype BSP (R0.01)
1.01	24/03/2011	Andrey Shitov, Reviewed and approved: Gennady Kuznetsov	Release notes for XPE BSP BSP (R1.00)

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3 Introduction

This document describes MSMST Board Support Package (BSP) for Microsoft Windows XP Embedded. This document provides:

1. Summary of BSP features;
2. Lists of the release package contents.

4 BSP contents

The XPE_BSP_MSMST_R0.01.zip file contains the following items.

1. **ProjectFiles:** This folder contains the Target Designer project files. This file can be loaded into Target Designer to generate XPE images that can then be copied to the target device:
 - ProjectFiles\MSMST_Setup.slx - contains the HAL and the board drivers, directly useable from the WXPE Target Designer tool.
 - ProjectFiles\MSMST_Test.slx – contains all components from MSMST_HAL.sld and MSMST.sld and additional standard XPE components. Image built with this .slx file was used for testing.
2. **Tapfiles:** This folder contains the TAP file for the MSMST board.
 - TapFiles\devices.pmq - this file was created with Target Analyzer to detect the hardware on the target device. By using Component Designer, you can import the .pmq file and generate a macro component that contains the device drives and related resources that were identified by Target Analyzer.
3. **SldFiles:** This folder contains the drivers not natively supported by the XP Embedded. Contents:
 - MSMST_HAL.sld - component definition file that lists the hardware components present on the hardware and the standard windows drivers needed. This component was creating by importing devices.pmq file in Component designer.
 - MSMST.sld: component definition file that contains all custom components for the MSMST board.
 - rep – repository for custom driver files.

Notes:

- Project and component definition files were developed with **Windows XP Embedded Service Pack 2 Feature pack 2007** with no other security updates installed.
- The “MSMST Setup.slx” is a kick-off for a XPE Image.
- With this slx-file can you build a evaluation version image. Lifetime: 120 days!
- You can upgrade this eval to a full version with a XPE Product Key.

Example:

Target Designer > Settings > Run-time Licensing > Product identification key

Run-time Image Licensing

[hide](#) | [more info](#) |

Product identification key (PID) [\(more info\)](#)

Figure 1

4.1 Components description

Component	Driver version	Description
Intel® Atom™ Processor E6xx Configuration Unit – 8183	9.1.2.10	Intel(R) Chipset Device Software Version: 9.1.2.1013 Target Chipset: Intel Atom Processor 6xx series Intel Platform Controller Hub EG20T Date: December 03 2010
Intel® Atom™ Processor E6xx LPC Bridge – 8186		
Intel® Atom™ Processor E6xx PCI Express Port 1 – 8184		
Intel® Atom™ Processor E6xx PCI Express Port 2 – 8185		
Intel® Atom™ Processor E6xx PCI Express Port 3 – 8180		
Intel® Atom™ Processor E6xx PCI Express Port 4 – 8181		
Intel® Atom™ Processor E6xx PCI Host Bridge – 4114		
Intel® Atom™ Processor E6xx PCI Host Bridge – 4115		
Intel® Atom™ Processor E6xx PCI Host Bridge – 4116		
Intel® Atom™ Processor E6xx PCI Host Bridge – 4117		
Silicon Image SiI 3132 SATALink Controller	1.0.22.0	Silicon Image SiI 3132 SATALink driver
Renesas Electronics USB 3.0 Root Hub	2.0.30.0	Renesas Electronics Corporation USB 3.0 hub driver
Renesas Electronics USB 3.0 Host Controller	2.0.30.0	Copyright (c) 2010 Renesas Electronics Corporation USB 3.0 host controller driver.
Intel Corporation Atom™ E6xx Intel® Embedded Media and Graphics Driver Extension MSMST	1.5.2.1816	Intel(R) Embedded Media and Graphics Drivers (Intel(R) EMGD) Version 1.5.2
Intel Corporation Atom™ E6xx Intel® Embedded Media and Graphics Driver Function 0 MSMST		
Intel® 82574L Gigabit Network Connection	11.7.32.0	Intel(R) 82574L Gigabit Network Connection driver
Microsoft UAA Bus Driver for High Definition Audio	5.10.0.5010	Microsoft UAA Bus Driver for High Definition Audio
Realtek High Definition Audio	5.10.0.6316	Realtek Semiconductor Corp. High Definition Audio System Software Ver: R2.56
KEApi System Driver	1.0.0.10	
PCIe Performance Demo	8.1.0	PCIe Performance Demo driver

Component	Driver version	Description
Intel® Network Connections		Intel(R) Network Connections Software Version 15.8 installer componentization. This component installs the applicaiton using its setup program during the FBA process. After image deployment C:\PROSETDX folder can be deleted.
Intel EMGD GUI MSMST		Adds Intel® Embedded Media and Graphics Driver configuration on the display properties setting tab.

4.2 Norton Ghost disk snapshot

MSMSTXX.GHO is a pre-deployed and configured image.

4.3 Norton Ghost distributive

The Norton Ghost program and its components are needed for deploying XPE image from disk snapshot.

Notes:

- **DOS** directory. Contains files for successful DOS loading (COMMAND.COM, IO.SYS, MSDOS.SYS). Used for bootable disk creation;
- **GHOST** directory. Contains files for successful Norton Ghost loading (GHOST.EXE , MOUSE.COM). Used for deploying partition snapshot on disk;
- **HPUSBFW.EXE** This program creates bootable disk.

4.4 Windows PE 3.0

The winpe_x86.zip archive contains Windows PE 3.0 build environment with included SATA and USB 3.0 driver. With this Windows PE you can deploy built XPE projects.

Notes:

- **ISO** directory contains the files required to build an .iso file by using the Oscdimg tool or to create a bootable USB flash drive.
- **etfsboot.com** this file is needed for .iso file creation.

5 Features

Onboard Hardware Support
Intel® Atom™ Processor E6xx Series Integrated Graphic and Video
Intel® High Definition Audio
Intel® 82574L Gigabit Ethernet controller
SATA interface
USB 3.0 interface
KEAPI (drivers only)

6 Tested BIOS versions

BIOS Information:

Project version	MSMST 0.05
Build Date	12/10/2010 08:40:28

7 Known issues

1. SATA 2.5" drive is not detected when connected to the top USB port via USB 3.0 to SATA adapter.
2. Standby is not supported by this board.
3. KEAPI library and GUI are not included.

8 Change log

Changes between R0.01 and R1.00:

- Upgraded Realtek Semiconductor Corp. High Definition Audio System Software to the version 2.58.
- Upgraded USB 3.0 driver to 2.0.30.0 version.
- Added KEAPI driver.