

ST-A20 Windows Driver Kit Release notes

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Supplies

The ST-A20 Windows Driver Kit supplies the following items:

- ◆ ST-A20 POS Driver Kit

Intel Chipset,Graphic,Network , Audio Drivers

The followings are the Network,and Audio drivers that support the Intel.
For Windows 2000/XP/Vista/WEPOS/POS Ready 2009/7

Driver	32-bit	64-bit
Intel® Chipset Device Software	V1.1.35.0	V1.1.43.0
Intel(R) Graphics Media Accelerator Driver	V2.11.15.0	V2.11.15.0
Intel(R) Network Connection	V4.0.100.1124	V4.0.100.1124

The following drivers are audio driver and touch panel driver

Driver	32-bit	64-bit
Realtek AC97 Audio	V11.50.0.42618	V11.50.0.42618

Elo Tablet Driver

The followings are the tablet drivers.

- ◆ Elo Touch Monitor Driver Package for Windows 2000 V1.0.0.0
- ◆ Elo Touch Monitor Driver Package for Windows XP/Vista/7/PosReady7 V5.4.1

JMicron RAID Driver

The followings are the tablet drivers.

- ◆ JMicron JMB36X RAID Driver R1.17.49.04
- ◆ TEC RAID API for JMicron RAID Driver V001.000

ST-A20 POS Drivers Kit

The followings are the POS drivers for ST-A20.

- ◆ OPOS Control Kit for ST-A20(for Windows2000/WEPOS/POSReady 2009/XP/Vista/7 PosReady 7)

TEC OPOS Control for ST-A20 V001.011

<i>Device</i>	<i>Version</i>	<i>OPOS Device Name</i>	<i>Document</i>
KITST-A10-BTNK	1.11.0.2	STA10EKEY	ST-A10 KeylockAPG.pdf
PKBST-50 Keylock	1.0.0.2	PKBST	TecOpos.pdf -> Section 6.1
PKBST USB Keylock	1.9.0.0	PKBSTUB	USB PKBST KeylockAPG.pdf
LIUST-A10	1.2.0.14	LIUST51	TecOpos.pdf -> Section 5.1
LIUWD-111 LineDisplay	1.2.0.15	WD111	LineDisplay LIUWD111APG.pdf
DRWST-5x Cash Drawer	1.2.0.7	DRWST	TecOpos.pdf -> Section 4.1
DRWST-5x Cash Drawer (Extension)	1.2.0.5	DRWEX	TecOpos.pdf -> Section 4.2
TRST-A1x USB Cash Drawer	1.8.0.1	DRWA1U	TRSTA1xAPG7th.pdf
TRST-A1x Serial Cash Drawer	1.8.0.2	DRWA1S	TRSTA1xAPG7th.pdf
TRST-A1x Parallel Cash Drawer	1.8.0.1	DRWA1P	TRSTA1xAPG7th.pdf
TRST-A1x LAN Cash Drawer	1.8.0.1	DRWA1L	TRSTA1xAPG7th.pdf
MCRST-A10	1.8.0.2	MCR RMS	ST-A10 MSRAPG.pdf
MCRST-50 MSR	1.0.0.3	MCRST	TecOpos.pdf -> Section 7.1
PKBST USB MSR	1.8.0.4	MCRSTUB	USB PKBST MSRAPG.pdf
TRST-A1x USB POS Printer	1.8.0.36	TRSTA1U	TRSTA1xAPG7th.pdf
TRST-A1x Serial POS Printer	1.8.0.35	TRSTA1S	TRSTA1xAPG7th.pdf
TRST-A1x Parallel POS Printer	1.8.0.35	TRSTA1P	TRSTA1xAPG7th.pdf
TRST-A1x LAN POS Printer	1.8.0.36	TRSTA1L	TRSTA1xAPG7th.pdf
HS-530-RS Serial Barcode Scanner	1.2.0.12	RSSCANNER	TecOpos.pdf -> Section 9.1
HS-530-RS Serial Barcode Scanner (Extension)	1.2.0.8	RSSCANNER. EX	TecOpos.pdf -> Section 9.2
WD-111 Library	-	-	WD-111 LineDisplay Library Spec.pdf

- ◆ TEC USB Drivers for Windows 2000, WEPOS, POSReady 2009, Windows XP, Windows Vista, Windows 7, PosReady 7.
- ◆ Set Keyboard Application V2.0.0.0

Change history

V001.000	New Release.
V001.001	Setup Guide Version up (for TFTST-A20 : Graphic & Touch Panel).
V001.002	Add Jmicron RAID Driver (R1.17.47.09) Add TEC RAID API for Jmicron RAID Driver (V001.000) Setup Guide Version up (for RAID Model).
V001.003	Update OPOS Control KIT for ST-A20. 1. TRSTA1P.dll,TRSTA1S.dll,TRSTA1U.dll (V1.8.0.31 -> V1.8.0.32) 1.1. Support of FontSize2. 1.2. Correction of the code128 print logic in the case of inputting odd columns. 1.3. Correction of the Control Panel about the registry setting of the both sides printing. 1.4. Correction of the phenomenon that printing is not possible when carrying out Claim-Release repeatedly. 1.5. Correction of the phenomenon that garbage is printed by rotary printing. 2. DRWA1P.dll,DRWA1S.dll,DRWA1U.dll (V1.8.0.0 New release) Support of New CashDrawer OPOS(connected to TRST-A1x). 3. kbfilter.sys for WindowsXP/WEPOS (V001.000 -> V001.001) Correction of the phenomenon that a blue screen occurs at the time of OS start by PS /2 keyboard non-connection. Note: This modules is used by OPOS Control for PKBST-50 and MCRST-50
001.004	Update OPOS Control KIT for ST-A20. ST-A20 OPOS Installer (V001.003 -> V01.004) 1. TRSTA1P.dll,TRSTA1S.dll,TRSTA1U.dll (V1.8.0.32 -> V1.8.0.33) TECShareParallel.dll, TECShareSerial.dll, TECShareUSB.dll (V001.000 -> V001.001) TECSParallelMgr.exe, TECSSerialMgr.exe, TECSUSBMgr.exe (V001.000 -> V001.001) 1.1. Correction of the phenomenon that simultaneous use of POSPrinter and CashDrawer is impossible in the same process. (target : TRST-A1x-P/S/U) 1.2. Correction of memory leak by repetition of Open-Close method. (target : TRST-A1x-P/S/U) 1.3. Correction of the phenomenon that OPOS locks it infrequently during device use. (target : TRST-A1x-P/S/U) 1.4. Correction of the phenomenon that Claim method does infrequently time-out by USB POSPrinter 1.5. Correction of the phenomenon that Open method fails infrequently in an overload state. (target : TRST-A1x-P/S/U)

V001.005	1.Upgrade “ST-A20_Windows_Setup_Guide.doc” -Add “5.2.3. Windows Embedded POSReady 2009” to install the RAID driver for POSReady 2009. - Edit “3.2.Installation for Intel Chipset Software” to install the Chipset driver for POSReady 2009. - Edit “3.5.Installation for Realtek Audio Driver” to install the Audio driver for POSReady 2009. - Edit the path of file for POSReady 2009 as following “Folder Configuration” 2.Upgrade below document to add “support POSReady 2009” -“ST-A20_Windows_Setup_Guide.pdf” -“JMicon RAID API Spec_1st.pdf” -“ST-A10 KeylockAPG.pdf” -“ST-A10 MSRAPG.pdf” -“TRSTA1xAPG.pdf” 3.Edit the folder name in driver kit for POSReady 2009 - Refer to following “Folder Configuration”
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001.006	Update OPOS Control KIT for ST-A20. ST-A20 OPOS Installer (V001.004 -> V001.006) 1. TRST-A1x OPOS Control 1.1.Support of TRST-A10 LAN POS Printer and CashDrawer connected to Printer. TRSTA1L.dll(V1.8.0.34 New release) DRWA1L.dll(V1.8.0.1 New release) TECShareLAN.dll(V001.002 New release) TECSLANMgr.exe(V001.002 New release) Tecpos.cpl(V002.021 -> V002.022) SetBitmapTool.exe(V001.000 -> V001.001) 1.2.Fault correction of the OPOS Control Application Programmer's Guide Correction of the BitMap number that I can register.(target : TRST-A1x-P/S/U) [Fault] 1 to 10 -> [Right] 1 to 11 1.3.Fault correction of OPOS. TRSTA1P.dll,TRSTA1S.dll,TRSTA1U.dll (V1.8.0.33 -> V1.8.0.34) DRWA1P.dll, DRWA1S.dll, DRWA1U.dll (V1.8.0.0 -> V1.8.0.1) TECShareParallel.dll, TECShareSerial.dll, TECShareUSB.dll (V001.001 -> V001.002) TECSParallelMgr.exe, TECSSerialMgr.exe, TECSUSBMgr.exe (V001.001 -> V001.002) 1.3.1.Resource leaks occur when I setting DeviceEnabled property to "True" at the time of the state that DeviceEnabled property is "True".[for Booths Supermarket] (target : TRST-A1x-P/S/U) 1.3.2. The prevention that printing data fall out. (target : TRST-A1x-S) 1.3.3 .An error event does not occur in power supply OFF with an async mode. (target : TRST-A1x-S) 1.3.4.OPOS crashes infrequently when I execute Release method during printing with an async mode. (target : TRST-A1x-P/S/U) 1.3.5.When mass async printing data accumulation is in a state and execute ClearOutput method, OPOS locks it. (target : TRST-A1x-P/S/U) 1.3.6.Misprint occurs infrequently when I use printer OPOS and cash drawer OPOS with an async mode at the same time. (target : TRST-A1x-P/S/U) 1.3.7.OutputCompleteEvent occurs several times when I execute PrintBitmap method with an async mode. (target : TRST-A1x-P/S/U) 1.3.8.When an error occurs during printing by TransactionPrint, I cannot execute TransactionPrint unless ClearOutput does whether you do Close-Open. (target : TRST-A1x-P/S/U) 1.3.9.When an error occur at the time of a printing start by TransactionPrint, the last printing contents are printed at the time of the next TransactionPrint practice earlier. (target : TRST-A1x-P/S/U) 1.3.10.At the time of PrintNormal practice during RotatePrint registration, I can output the paper back side and a surface appointment command. (target : TRST-A1x-P/S/U) 1.3.11.OPOS does deadlock infrequently when Release method execution and paper empty event occur at the same time. (target : TRST-A1x-P) Update Jmicron RAID Driver (R1.17.47.09 -> R1.17.49.04) Correction of COM3 overrun error problem. Correction of a blue screen occurrence when I do "Create RAID" in Operating System. Update "ST-A20_Windows_Setup_Guide.pdf" Add the procedure of CreateRAID with RAID Utility. Add Instructions about POSReady 2009.
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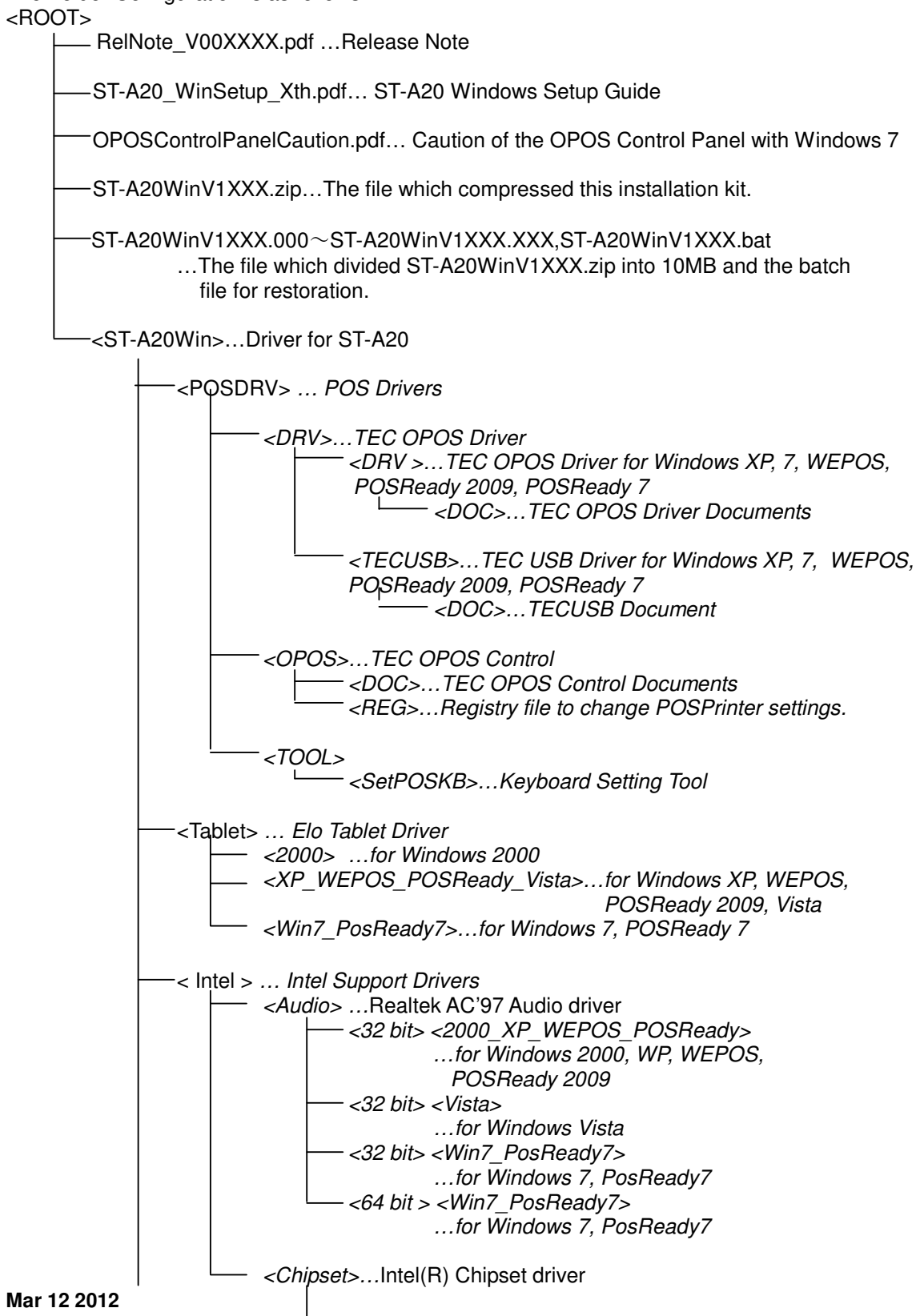
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V001.007	Upgrade of the OPOS Control installer (V001.006->V001.007) Modify OPOS Control Installer for Silent Installation. -Add PKBST USB Keylock OPOS(KEYLCKUB.dll) -Add PKBST USB MSR OPOS(USBMSR.dll) -Add WD-111 LineDisplay OPOS(Liuwd111.dll) -Add USB POSKeybaord Modules -Add WD-111 LineDisplay Library(WD111.dll) Add Tool -Add SetPOSKB (V2.0.0.0)
V001.008	1.Upgrade “ST-A20_Windows_Setup_Guide.doc” - Add “5. Setup for Windows 7 Professional” 2.Upgrade below document to add “support Windows 7” -“ST-A20_Windows_Setup_Guide.pdf” -“ST-A10 KeylockAPG.pdf” -“ST-A10 MSRAPG.pdf” -“20101108_E_TecGentApg_7th.pdf” -“USB PKBST KeylockAPG.pdf” -“USB PKBST KeylockAPG Appen.pdf” -“USB PKBST MSRAPG.pdf” -“USB PKBST MSRAPG Appen.pdf” 3.Edit the folder name in driver kit for Windows 7 - Refer to following “Folder Configuration” 4.Evaluate Vendor driver & OPOS drivers of Windows 7 Phase1 support Test with Windows Embedded standard 7 environment. Device of Windows 7 Phase 1 Support - Touch Panel: ELO Touch Panel - Line Display: LIUST-51, LIUST-A10 - Drawer: TEC DRWST Cash Drawer - MSR: MCRST50(PKBST50), MCRST-52(PKBST52), MCRST-A10 - POS Printer: TRST-A1x (Serial, Paralell, USB, LAN)
V001.009	1. Evaluate Vendor driver & OPOS drivers for Windows 7 Phase2 support Test with Windows Embedded standard 7 environment. Device of Windows 7 Phase 2 Support: Phase 1 device and below - TFT: TFTST-A20/B20, TFTST-A10/B10, TVS TFT - Keylock: PKBST50 Keylock, PKBST52 Keylock, ST-A10 Keylock - POS Keyboard: PKBST50, PKBST52 - Line Display: LIUST-53, WD-111, LIUST-A00 - Drawer: EPSON type drawer, Korea Drawer - MSR: MCRST50, MCRST52 - MSR K/B wedge: MCRST50, MCRST52, MCRST-A10 - POS Printer: TRST-56, TRST-A00 - Scanner: HS-530-RS All devices are supported by this phase.

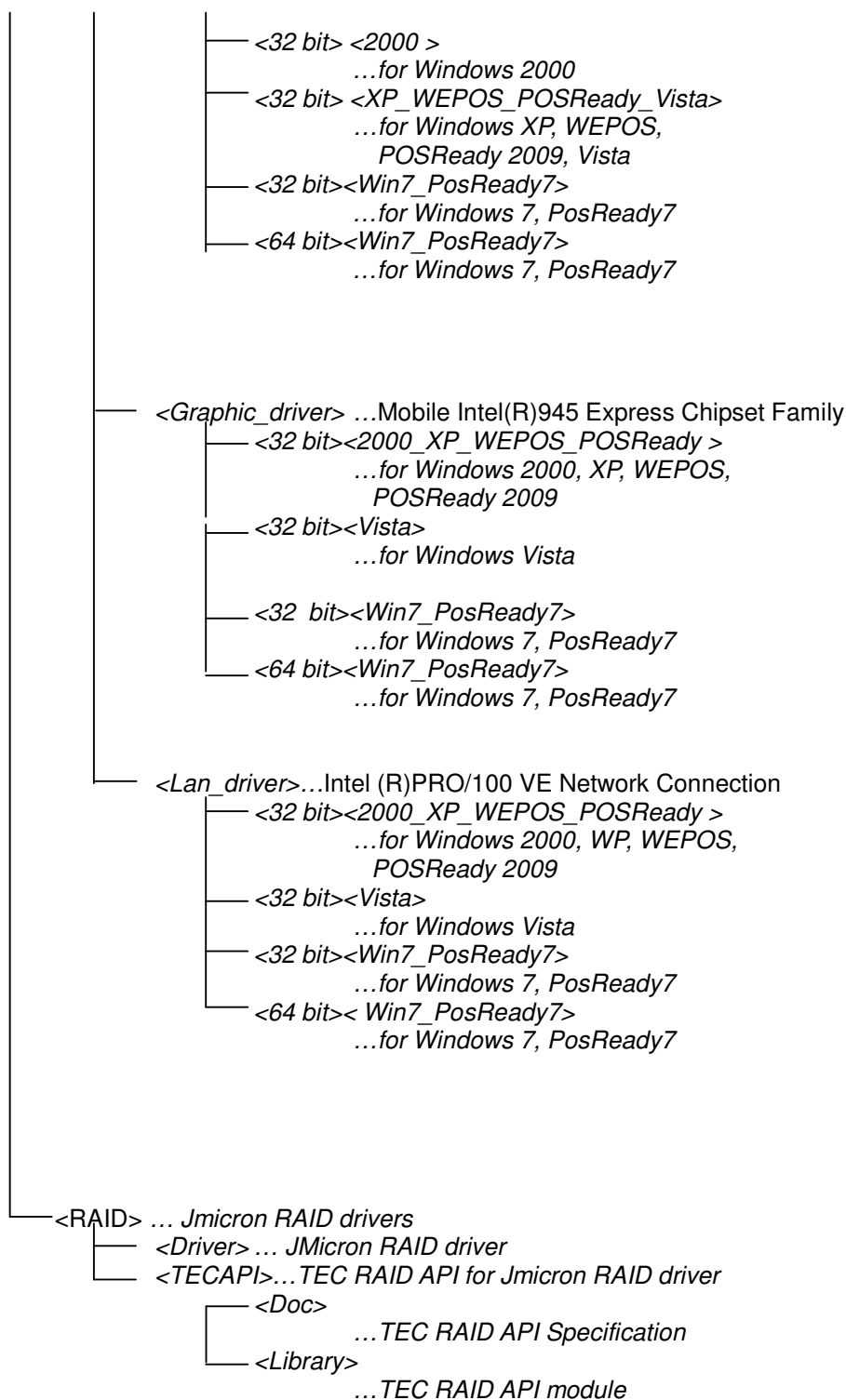
V001.010	1. Evaluate Vendor driver & OPOS drivers with Windows 7 Professional 2.Upgrade below modules Add the LIUST-A00 setting panel. And counter to Windows 7 UAC limitation - Replace the OPOS Control Panel (Ver.2.0.0.26 -> Ver.2.0.0.27) - Replace the OPOS Check Health Program (Ver.1.0.0.7 -> Ver.1.0.0.8) Correction of the writing Log function for Windows 7 - Replace the TEC General USB library (Ver.1.0.0.5 -> Ver.1.0.0.6) - Replace the TEC Log manager (Ver.1.0.1.4 -> Ver.1.0.1.5) 3. Upgrade below installer Correction of the Install Path problem of old installer - OPOS Installer
V001.011	Support PosReady 7 (32 & 64 bit) *TEC Driver and OPOS Driver is not supported in POSReady 7 (64 bit) * 64 bit OS is not supported in Celeron model.

Folder Configuration

The Folder Configuration is as follows:



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Modules List

OPOS installer

Filename	Version	Date	Time	
Oposdisp.ocx	1.0.0.3	2000/12/19	15:13:46	LineDisplay OPOS CO
Liust51.dll	1.2.0.14	2004/10/07	16:59:40	LIUST-51 LineDisplay OPOS SO
LIUWD111.dll	1.2.0.15	2009/12/08	09:36:11	LIUWD-111 LineDisplay OPOS SO
KEYLOCK.ocx	1.11.0.1	2008/06/16	10:11:20	Keylock OPOS CO
eKeyOPOS.dll	1.11.0.2	2009/10/06	19:46:58	iButton OPOS SO
Pkbst.dll	1.0.0.2	2000/12/19	18:59:38	PKBST OPOS SO
MSR.ocx	1.8.0.0	2007/02/07	18:32:40	MCR OPOS CO
MCR RMS.dll	1.8.0.2	2008/08/21	14:17:24	ST-A10 MSR OPOS SO
St55msr.dll	1.0.0.3	2010/01/27	00:08:08	MCRST-5x MSR OPOS SO
USBMSR.dll	1.8.0.4	2008/10/14	10:27:10	PKBST USB MSR OPOS SO
Oposdrw.ocx	1.8.0.0	2009/04/02	13:56:02	CashDrawer OPOS CO
DRWSO.dll	1.2.0.7	2007/11/30	16:49:38	DRST-5x OPOS SO
Drwex.dll	1.2.0.5	2008/01/22	21:17:26	DRST-5x OPOS SO(Extension)
DRWA1U.dll	1.8.0.1	2009/10/20	22:46:53	TRSTA1U(USB) Cash Drawer OPOS SO
DRWA1S.dll	1.8.0.2	2010/01/21	20:52:19	TRSTA1S(RS232C) Cash Drawer OPOS SO
DRWA1P.dll	1.8.0.1	2009/10/20	22:48:03	TRSTA1P(Parallel) Cash Drawer OPOS SO
DRWA1L.dll	1.8.0.1	2009/10/24	15:21:15	TRSTA1L(LAN) Cash Drawer OPOS SO
Oposscan.ocx	1.8.0.0	2004/10/13	15:42:12	Scanner OPOS CO
Rsscanso.dll	1.2.0.12	2006/08/04	15:31:28	HS-5x0 Serial Scanner OPOS SO
RSscanEX.dll	1.2.0.8	2004/01/15	12:42:46	HS-5x0 Serial Scanner OPOS SO (Extension)
OPOSPrinter.ocx	1.8.0.0	2004/10/13	15:39:10	POSPrinter OPOS CO
TRSTA1U.dll	1.8.0.36	2010/01/19	22:47:22	TRSTA1U(USB) POS Printer OPOS SO
TRSTA1S.dll	1.8.0.35	2010/01/20	14:31:23	TRSTA1S(RS232C) POS Printer OPOS SO
TRSTA1P.dll	1.8.0.35	2010/01/20	12:39:22	TRSTA1P(Parallel) POS Printer OPOS SO
TRSTA1L.dll	1.8.0.36	2010/01/20	12:36:54	TRSTA1L(LAN) POS Printer OPOS SO
OPOSCHK.exe	1.0.0.8	2011/01/07	20:50:26	Toshiba TEC OPOS Check Health Application
SetBitmapTool.exe	1.0.0.1	2009/10/16	19:46:45	Bitmap Registration to Flash ROM
oposevmg.dll	1.2.0.4	2003/06/10	10:23:58	OPOS Event Manager Library
logMgr.dll	1.0.1.5	2010/11/01	20:31:23	Toshiba TEC LOG Manager Library
oposhook.dll	1.0.0.1	2004/09/17	23:28:00	OPOS Library
raslibc.dll	1.2.0.4	2004/08/06	13:05:24	RAS Library
MSCOMCTL.ocx	6.1.95.45	2002/12/20	14:02:44	Windows Common Controls ActiveX Control DLL
comdlg32.ocx	6.0.84.18	2000/05/22	16:58:00	Microsoft CDialog ActiveX Control DLL
Tecpos.cpl	2.0.0.27	2010/11/29	15:44:52	Toshiba TEC Control Applet
TECUSB.dll	1.0.0.6	2010/10/27	12:39:03	Toshiba TEC USB Library
TECShareUSB.dll	1.0.0.5	2010/09/17	13:35:24	TRST-A1x USB port share library
TECShareSerial.dll	1.0.0.2	2009/10/26	20:39:54	TRST-A1x Serial port share library
TECShareParallel.dll	1.0.0.2	2009/10/26	22:29:42	TRST-A1x Parallel port share library
TECShareLAN.dll	1.0.0.2	2009/10/26	22:35:46	TRST-A1x LAN port share library
TECSUSBMgr.exe	1.0.0.5	2010/09/27	13:14:20	TRST-A1x USB port share driver
TECSSerialMgr.exe	1.0.0.2	2009/10/26	22:42:16	TRST-A1x Serial port share driver
TECSParallelMgr.exe	1.0.0.2	2009/10/27	20:42:35	TRST-A1x Parallel port share driver
TECSLANMgr.exe	1.0.0.3	2010/01/07	09:39:29	TRST-A1x LAN port share driver
Tecusbd.sys	1.0.0.7	2004/11/25	20:45:00	Toshiba TEC general-purpose USB driver
TecUSBDEx.INF	-	2008/06/24	11:41:42	USB driver Setup INF file
kbfilter.sys	5.0.1636.1	2009/01/14	11:33:26	PS/2 Keyboard Filter Driver
KBFInst.exe	5.1.2600.1106	2007/07/12	22:39:34	PS/2 Keyboard Filter Driver's Installer
KBFInst.inf	-	2007/07/12	21:20:12	PS/2 Keyboard Filter Driver Setup INF file
KeyMonHk.dll	2.0.0.2	2003/09/01	17:17:10	Keyboard Hook Library
mkmgr.exe	1.0.0.0	2007/04/02	14:05:20	PS/2 Keyboard Msr & Keylock Control Program
Posesc32.dll	2.0.0.4	2010/01/29	13:19:31	Keyboard Library(PS/2)
POSESC32.dll	1.0.0.6	2009/10/06	13:52:09	USB POSKeyboard Library
UsbKbMgr.exe	1.0.0.8	2009/05/18	08:20:41	USB Msr & Keylock Control Program
liuwd111.h	-	2009/07/22	16:02:22	WD-111 Library header file
WD111.lib	-	2009/07/27	17:34:16	WD-111 Library lib file
WD111.dll	-	2009/07/27	17:34:16	WD-111 Library

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DRW.INF	-	2008/02/14	10:44:22	CashDrawer Driver Setup INF file
DRVDRW.sys	4.0.1381.1	2008/03/22	11:56:28	CashDrawer Driver
install.exe	-	2001/05/22	15:05:12	Driver's Installer
zzwdt.sys	4.0.1381.1	2008/02/28	15:29:54	Watchdog Timer Driver

USB driver

Filename	Version	Date	Time	
Tecusbd.sys	1.0.0.7	2004/11/25	20:45:00	Toshiba TEC general-purpose USB driver
TecUSBDEx.INF	-	2009/09/02	14:57:28	USB driver Setup INF file

Cautions

NOTE: For restoring the divided file, save the following file in the same place of HDD.

ex) When a version is V001.XXX

ST-A20WinV1XXX.000

ST-A20WinV1XXX.001

ST-A20WinV1XXX.002

ST-A20WinV1XXX.003

ST-A20WinV1XXX.004

ST-A20WinV1XXX.005

ST-A20WinV1XXX.006

ST-A20WinV1XXX.007

ST-A20WinV1XXX.008

ST-A20WinV1XXX.009

ST-A20WinV1XXX.010

ST-A20WinV1XXX.bat

Execution of “ST-A20V1XXX.bat” restores “ST-A20V1XXX.zip” to the same place as “ST-A20V1XXX.bat”.

NOTE: PKBST-50 supports only Windows XP, WEPOS and POSReady 2009.

NOTE: It is impossible to install the WEPOS 1.0 in ST-A20.(a blue screen occurs during installation)

NOTE: In case of installing PKBST-50 on POSReady2009, refer to the “OposCaution.pdf”.

NOTE: Please see “OPOSControlPanelCaution.pdf” when using OPOS Control Panel