



August 18, 2010

## **USB Softmodem Software Version 2.2.102 Release Notes**

### **1 Hardware supported in this release**

- SV92U2 with CSP1040 DAA
- USB 2.0 compliant. High speed and full speed data rate support

#### **1.1 Hardware Features Supported**

- System resume on incoming. Ring validation for WOR.
- International DAA with country specific homologation settings programmed by software based on country ID.
- Line over current detection and protection.
- Caller ID.
- Line in use and extension pick-up detection.
- Status indication LEDs.

### **2 Operating Systems Supported**

- Windows XP
- Windows Vista
- Windows 7

### **3 Modem Features Supported**

- Data Modes: V.92, V.90, V.34, V.32bis, V.32, V.29, V.23, V.22bis, V.22, V.21, Bell212A, Bell203J
- Fax Modes: V.17, V.29, V.22ter, V.21 Ch 2
- DCE-DCE Protocols: V.8bis, V.42, LAPM, MNP2-MNP4, V.42bis, MNP5, V.44
- DTE Protocols: V.250, V.80, MS #UD, T.31 Fax Class 1
- Telephone Answering Machine (TAM): V.253 compliant, supports 8 kHz sampling rate with 16 bit linear, 8 bit linear, 8 bit U law, 8 bit A law, and 4 bit IMA-ADPCM compression methods.

### **4 V.92 features supported in this release**

- Call Waiting/Modem On Hold. Call Waiting detection enabled by default. MOH enabled by default.
- Fast Connect. Fast Connect enabled by default
- PCM upstream, disabled by default. Provision to disable PCM upstream completely per country basis.

This release also supports V.44 data compression, caller ID detection on call waiting, and Agere MOH application, universal call waiting (DTMF generation), 3-way calling.

## 5 Customizing ATIO response string

The ATIO response consists of two parts, the product name and version number. The default product name string is "LSI SoftModem". The version number string is "Version " appended with current version number. For example, if the current version is 2.2.99 the default ATIO response is

LSI SoftModem Version 2.2.99

The product name part of the response could be customized by adding following line in the inf files under [PortMod.AddReg]

HKLM,SOFTWARE\Agere\SoftModem,FullProductName, "<product name string>"

For example if the product name string is LSI USB SoftModem then the inf entry should be,  
HKLM,SOFTWARE\Agere\SoftModem,FullProductName, "LSI USB SoftModem"

## 6 History of changes

Softmodem version 2.1.61 is the first release with USB support.

Changes made since 2.1.61 release:

1. Improved CSP1040 initialization.

Changes made since 2.1.62 release:

1. Enable ring validation for wake-on ring.
2. Fixed an enumeration issue when another Agere softmodem is present in the same system.
3. Modified CTR21 VI template setting for better margins.
4. Fixed performance issues with Win98se.

Changes made since 2.1.63 release:

1. Fixed call-progress monitoring problems with WinME and Win98se.
2. Enabled type 1 caller ID for Egypt, Jordan, and Uruguay.
3. Microsoft Vista operating system compliance changes.

Changes made since 2.1.64 release:

1. Fixed WinMe and Win98se problems caused by Vista changes made in earlier release.

Changes made since 2.1.65 release:

1. Fixed HCT test issues.
2. Implemented extension pick-up/line in use detection feature.

Changes made since 2.1.66 release:

1. Changed Belarus homologation parameters.
2. Modified the AT command for extension pickup/line in-use detection.

Changes made since 2.1.67 release:

1. Fixed V32 mode bug introduced in earlier release by a change made to fix compilation warning.
2. Added <DEL>p event reporting for extension pick-up/line in-use detection in voice mode.

Changes made since 2.1.68 release:

1. Fixed AT%TT60 homologation test command causing memory corruption. (MR44892)

2. Fixed extension pick-up reporting in voice mode, replaced <DEL>p with <DEL>P. (MR41804)

Changes made since 2.1.69 release:

1. Fixed French Type 2 CID detection. (MR43300)
2. Status LED support for W98se and WME. (MR45816)

Changes made since 2.1.70 release:

1. Implemented device version information display in ATIS command response.
2. Fixed a race condition in CSP1040 device version detection during device initialization. (MR47479)
3. Added support for several new countries. (MR47128)
4. Fixed Product Version number display (in driver file properties), the driver version number was displayed twice in earlier releases.
5. Fixed TAPI country detection problem when there are more than 9 country locations created by user.
6. Fixed MOH call switching problem reported from field in France. (MR43300)
7. Fixed busy detection field problem reported in TAM mode with France country setting. (MR46254)
8. High Speed support in Win98se with third party bus driver.

Changes made since 2.1.73 release:

1. Fixed send Fax not working in 64-bit Vista RC1. This problem was observed only with 64-bit Vista and is caused by 64-bit fax application compatibility. (MR51784)

Changes made since 2.1.74 release:

1. Fixed Vista wake on ring issues. (MR51956)
2. Modified agrdiag.exe to fix a potential problem caused when agrdiag.exe was run while the port was not open and the driver state was active. (MR52285)
3. Changed default (USA) call progress detection threshold based on field report. (MR53334)
4. Modified xp/vista inf files to take care of the Vista hybrid power management.

Changes made since 2.1.75 release:

1. Fixed modem not responding after resume when port is open with dial-up networking before going to hibernation. (MR53738)

Changes made since 2.1.76 release:

1. Fixed longer delay in resume from suspend observed with earlier releases. (MR53907)

Changes made since 2.1.77 release:

1. Fixed dial-tone detection problem reported in Malaysia. (MR56746)
2. Changed Tunisia homologation parameters based on PTT test results.

Changes made since 2.1.78 release:

None.

Changes made since 2.1.79 release:

1. Fixed ring detection frequency limit setting problems. (MR57873)

Changes made since 2.1.80 release:

1. Fixed type 1 CID detection problem reported in France. (MR60800)
2. Speakerphone support.
3. Improved Japan CID ring cadence detection. (MR61260)
4. Modified type 1 CID response when number or name is not present. The new response is consistent with ITU V.253 spec. (MR61823)

Changes made since 2.1.81 release:

1. Fixed modem retraining issue with Vista when power mode is set to Power Saver mode. (MR62050)
2. Increased call progress volume. (MR 62645)
3. Fixed data LED not working in FAX mode. (MR62688)
4. Modified DisplayInstallStatus option in modem setup. English message is used as default for any unsupported language. (MR55252)

Changes made since 2.1.82 release:

1. Fixed modem some times not responding to AT commands with Vista. (MR62683)

Changes made since 2.1.83 release:

1. Fixed audio call progress not working after resume. (MR63388)
2. Fixed modem not able to make connection with Vista X64 and 4GB RAM. (MR63378)

Changes made since 2.1.84 release:

1. Improved Type 1 CID detection. (MR63399)
2. Fixed lower speed (V21, Bell103, V23c) compatibility issues. (MR64400)
3. Fixed audio call progress problems after sigverif test. (MR63889)

Changes made since 2.1.85 release:

Changes made in 2.1.86 release are PCI specific and do not affect USB modems.

Changes made in 2.1.87 release are MDC specific and do not affect USB modems.

Changes made since 2.1.87 release:

1. Modified softmodem service (agrmsvc.exe/agr64svc.exe) to set system power management to "High performance" mode while modem is off-hook only when the "MiscOptions" flag in the registry is set to 01. This change is made in 1.0.0.8 version of agrmsvc.exe/agr64svc.exe. (MR62050, MR65992, MR66004)

Changes made since 2.1.88 release:

1. Windows 7 specific changes. The changes have no impact on other Windows OS drivers.

Changes made since 2.1.89 release:

1. Microsoft OEM ready changes. (MR67454)
2. Improved type 1 CID performance to pass TIA-777-A-2003 test. (MR67302)
3. Introduced a delay between modem going off-hook and turning on call progress sound to avoid any unpleasant sound caused by glitches on the phone line. (MR66545)

Changes made since 2.1.90 release:

1. PCIe specific changes. The changes have no impact on USB modems.

Changes made since 2.1.91 release:

1. PCIe specific changes. The changes have no impact on USB modems.

Changes made since 2.1.92 release:

1. Changed S9 lower limit. S9=0 now disables carrier detection in Bell 103 mode.

Changes made since 2.1.93 release:

1. Changed "Agere" to "LSI" in ATI commands response strings.
2. Inf file names changed – file names start with "lsi" instead of "agr"
3. "Agere Systems" changed to "LSI" for friendly names in inf files.

Changes made since 2.1.94 release:

1. Brazil power cross test changes.
2. Disabled V.44 for non V.92/V.90 modes. (MR69681, MR71961)
3. From this release on words version number changed to 2.2.xx to distinguish Windows 7 releases.

Changes made since 2.2.95 release:

1. Fixed call progress turning on after hook-flash during MOH. (MR71789)

Changes made since 2.2.96 release:

1. Fixed DTM "System-Disable Enable with IO" test failure. (MR72137)

Changes made since 2.2.97 release:

1. Fixed ETSI FSK CID when there is no ring following the CID. (MR72242)

Changes made since 2.2.98 release:

1. Fixed ETSI DTMF CID failure issues. (MR69328)
2. Modem Setup application modified to install the device metadata package when the modem is installed on Win7. (ITS72377)
3. Co-installer modified to delete the Add/Remove Program entries for the modem when the modem is uninstalled from the Device Manager/Phone and Modem property pages.
4. Multiple USB softmodem support. (MR72553)
5. Voice and snoop features for home automation application (MR73087)

NOTE: No USB modem related changes made in 2.2.99 and 2.2.100 releases.

Changes made since 2.2.100 release:

1. Fixed modem installation problem when a port allocated by operating system is not free. The driver uses next available free port when a port allocated by OS is not free. (MR74712).

Changes made since 2.2.101 release:

1. Added USB 3.0 support. Fixed connectivity problems with USB 3.0 port. (MR75900).