Download DLL release note

Version 4.41.x.x

SMS00916912: "wrong IMEI / SimLocks after Flashing" fixed (ebl_xgold213.h updated).

Version 4.40.x.x

SMS00837188:
ifwd_comm.c: updated to support usb boot using usb bootrom.
ifwd_comport.c: purge of internal buffers not done for usb port.
ifwd_boot_sgold.c: boot using usb bootrom added.

Version 4.39.x.x

SMS00882793: Download DLL's protocol handler is missing a range check on error codes returned by target.
SMS00879966: XMM6180 Modem Express Card Software Reset for triggering flash procedure (added GP0 control)
SMS00879804: Disable option for setting test mode in FlashTool (added parameter to ban EEPROM writes).

Version 4.38.x.x

Solved SMS00844023 Update download DLL to support xgold110

Version 4.37.x.x

Solved SMS00843392, SMS00849017, SMS00837477, SMS00857427, SMS00849017, SMS00847521:

Flashtool auto detect if the chip is ES1.x or ES2.0 and select the correct EBL_Loader/EBL
Download with support for XG618 for XMM6180 and ICE3 hardware.
Updated I2C driver for SGOLD2, so not found I2C devices will not stop download process

No Lint & compiler warnings policy is now enforced!

Version 4.36.x.x

SMS00849017: "Handle ES2 Link Establishment Response"Implement support for new XM618 ES2 Link Establishment (Boot) Response in the Download DLL.

Version 4.35.x.x

SMS00844023: "Update download DLL to support xgold110". The support is added under the assumption that XG110 behave like XG102 download wise.

Version 4.34.x.x

SMS00827942: "[Download Tool Chain] Release Planning - INI file handling". Support for Injected ZIP file in DLL added. Note that the FlashToolE2.exe may not yet support this feature, so this is only part of the solution.

SMS00833907: "Download DLL for XG213 in CC". XG213/XMM213 chip download support added.

Version 4.33.x.x

Fixed SMS00831325: "Spansion MCP/NOR support".
Removed ripple on TX for XMM6180. Support for spansion AAD mux flash chips on XMM6180.

Version 4.32.x.x
Fixes SMS00782492: "Support for Spansion NOR flash for XMM6180 platform."

Version 4.31.x.x
Fixes SMS00802281:
Fixed problem with upload of large data packages (>16KB).
Support faster usb download and upload of largeblock NAND based target.

Total progress indication is merged from other branches (this has been a popular customer request that should be on the common branch also).

Version 4.30.x.x
- SMS799062 Bug in 'Check file signature HW cfg value'
- SMS764778 Handling of unfinished download ... (need MMI update to close the UTP).
- Misleading errors are removed.
- Support for total progress.

Version 4.29.x.x
- Solution for SMS00780830: Support for XGOLD618. Autodetect if hardware is set for AD or AAD flash mux mode. PRG file must contain correct EBU setting for AD or AAD flash mux mode.
- Fixed correct length of last upload request for binary upload.

Version 4.28.x.x

- Solution for SMS774668 is excluded from this release as it is not requested by one customer.
- All other solutions were included in the test release (4.27_test_4) approved by the same customer.

Version 4.27.x.x

- More support for EGoldVoice Ver2
- Linerarize problem of SGold systems fixed. (SMS767873)
- Length of protocol enhancements structure is corrected (SMS774668)
- Handling of injected EBL and RAM-PSI in binary mode is fixed. (SMS768449)

Version 4.26.x.x

Fixed bug in EEPROM update linearize function.
Prepare for support of XGold102 and XGold 213 chipsets.

Version 4.25.x.x

Default RAM-PSI was included in the previous release, use same as in 4.23.

Version 4.24.x.x

Load of EBL with higher baudrates added (instead of 115200).
Fixed bug in certificate validation for EGold.

Version 4.23.x.x

EBL-Loader with support for high speed loading of EGoldVoice EBL is removed from the release
again as download can not start unless the new EBL2 is injected.

Version 4.22.x.x

Support for high speed loading of EGoldVoice EBL.
Updated target error handling for EGoldVoice.
Error, in handling of encrypted sec-pack when using HW-dongle, is fixed.
Code warnings removed.
Support for more baudrates.

Version 4.21.x.x

UTP: SMS00750796, SMS00741345:
  - Base address of 'Erase whole flash' is fixed for EGold Voice.
Speed optimization:
  - Support for high speed load of EBL
  - Support for target conditional skip erase.
  - Support for target skip write-package CRC check.
  - Support for high voltage programming.

API readout of flash programming voltage. EFP
Support for download of FFC files.
Check of USER_ID HW bits against bits in the certificate in secure mode on EGOLD Voice.

Version 4.20.x.x

Return error if USB device is not found when using USB auto download mode.
Fixed problem with overwriting allocated memory in function COMPORT_open() located in IFWD_comport.c
when trying to open can USBx port multiple times. This is related to Port swapping issues.

Version 4.19.x.x

Now support for two identical flash devices on Sgold3 in the default EBL.
Error, in 'Erase whole flash before download', is fixed.

Version 4.18.x.x

Sideeffect found in the changed CRC handling in previous version. It is now fixed.

Version 4.17.x.x

Error, in the "erase whole flash" option for SGold3 NOR systems, is fixed.
Error, not downloading the last byte if size is odd, is fixed.
Error, in CRC check handling, is fixed.

Version 4.16.x.x

Binary Mode Upload for NAND can now generate a pre-flash image (controlled by the parameter
IFWD_DL_dll_parameter_upload_mbn_data).

Added parameter IFWD_DL_dll_parameter_force_plain_upload to control that uploads should only
include the specified data itself (no extra added EBL's or MBN at the end).

Support for downloading external EBL with USB added.

Version 4.15.x.x

Error in binary mode preflashing download fixed.
Error in binary upload fixed.
Added time stamps to function traces.

Version 4.14.x.x

Updated to handle RAM-PSI code to be taken from the EBL appended to a BIN file.

Version 4.13.x.x

Further corrections to fix problems with multi USB download in automatic mode.

Version 4.12.x.x

Fix for problem with multi USB download in automatic mode.
File API interface functions are fixed so they support file streams.

Version 4.11.x.x

Error in the EEPROM patch concept for EGoldRadio is fixed.

Version 4.10.x.x

Same as version 4.9; due to confusion when using our new automatic release tool.

Version 4.9.x.x

Unstable boot on SG3 is fixed.
Error – no erase of dynamic eeprom after download of bootcode FLS file, is fixed.

Version 4.8.x.x

UTP SMS00661541, problem with core voltage level, is fixed.
UTP SMS00703073, Support for new EEPROM patch concept.
Memory leaks eliminated.
Error, in conditional erase of dynamic EEPROM vs download of FLB files, is fixed.

Version 4.7.x.x

Error in erase-all mode for NOR flash is fixed.

Version 4.6.x.x

Added support for trace on Single File Handler state-machine and handling flags.
Support for flash memory type SST32HF64A2
Communication buffers size doubled to 32K to support USB transfer using 16K block size.
Error in RX trace function is fixed

Version 4.5.x.x

Fixed repeated injection of EBL for EGold.
SGold timer duration for EBL transfer increased to 30000 milliseconds to avoid timeouts on large EBL's.
Added support for trace of DLL actions (Function calls and IO).

Version 4.4.x.x

Support for binary mode NAND system pre-flashing and cloning is finalized.

Support for NAND erase all option to include erases of bad-blocks also.
Conditional erasure of dynamic eeprom is fixed so it will work correctly on NAND systems.
EGoldVoice boot handler is updated so "HandshakeMode" values from the PRG files does not cause CRC errors.

Version 4.3

Fixed the last functions that didn't check for invalid header format, so that the DLL does not enter an endless loop on invalid data.

Version 4.02

Made DLL more robust against getting files without a proper header on the interface (needed to allow Binary mode download).

Version 4.01

Must be used with tool chain version 2.x

Speed optimizations:
   IMPOTRANT: PC USB driver "`10/07/2007,1.0.0.4`" (or newer) must be installed before the speed optimizations will have full effect. This driver is included in the release.

- Support for 16Kbytes protocol packages.
- Protocol CRC calculation and check can now be disabled if USB-loader in target supports this feature.
- File data CRC calculation and check can now be disabled if USB-loader in target supports this feature.

Erase of total area length.
Erase of whole flash.
Multi TOC file handling finalized.

Version 3.10 (Version should have been 4.00)

Support for new prg format added due to file format change. It will not be backwards compatible!

Version 3.09

Support for Sgold-Radio ES2 also on NAND systems (only small block NAND's at the moment)

Version 3.08

Support for Sgold-Radio ES2

Version 3.07

Error in bootloader for MPE-Lite is fixed.
Support for Sgold-Radio ES2 is prepared – still only support for ES1

Version 3.06

Error in updating the static EEPROM on NAND systems is fixed.

Version 3.05

Support of SG3H added.
Error, in checksum handling for multi load region files, is fixed.
Checksum error in EEPROM download when "Test mode" is enabled.

Version 3.04

Error, preventing DFFS files to be downloaded correctly, is fixed.

Version 3.03

Error, in handling of DSP code download, is fixed.
Error, in handling of injected EBL-loader, is fixed.

Version 3.02

Now the whole flash can be erased when downloading boot-system files to a NAND system. (UTP SMS00443803)

Version 3.01

Fixed bug in DFFS handling.

Version 3.00

Added support for E2 Tool chain (new PRG file header format).
Added support for NAND disk system (.dfat files).
Compiled the stand-alone library with Visual Studio .Net (VC7) instead of VC6.

Version 2.15

Bugfix to avoid damage of NAND board (forced timeout if no partition found).
The bootload cannot be overwritten if this "don't touch" flag is set by FlsSign.exe.

Version 2.14

Close comport handling is improved.
Interval between AT sync word transmit is now 20ms
NULL pointer check added to EEP update mem array.

Version 2.13

Added support for S-Gold Radio.

Version 2.12

Added 20ms delay after device synchronized to make boot more stable.
Functions to send 'End of process' pack to the target, is added.
New release including major cleanup and use of new MAC NAND interface introducing PSI and SLB partition handling.
Now the correct CFG file is selected for eeprom update in case no FLS file is downloaded.
Removed unused define, change sending time from 20ms -> 1ms (will not have much effect in Windows XP).

Version 2.10

Added support for SG3 bootcore 3
Error check and 32 bit alignment introduced to the EEPROM linearize function.
Support for HASH check on EEP files is added.
Support for separate download of dynamic and static part of DFFS files is added.

Version 2.9

Fixed USB boot problem by polling as before when booting on USB.

Version 2.8

Fixed problem during multi channel boot: a boot would erase target capability all channels (not just the current). This resulted in checksum errors if a channel was booted while others were downloading.
Fixed COM ports that remain open when open has failed (e.g. open a normal COM1 with higher speeds than 115200 would fail, and leave the port open).
Error in EBL Memory configuration fixed.
Speed optimization: removed run-time debug from main loop.

Version 2.7

Reduced CPU load while booting by not polling in rx result on every clock.
Fixed problem with Protocol handler that will keep on failing once it has failed once.
Fixed problem with using 32 channels (last channel will now open)
HW reset and power down functionality added
New release supporting 4k NAND alignment for the PI region in the code sw partition.

Version 2.6

Added extra reset timeout to avoid repeated downloads on the same phone during USB autoboot download.
Fixed COM port open bug, where a port open fail would cause it to fail forever until the program is closed and run again.
Handling of 1Gbit BIN files are now correct.
Handling of Load Regions is changed to use addresses instead of total length.
Sec End now only send on Erase dyn EEP for NAND.
Source of PC-crash in BIN mode is fixed.
Support for SST flash is now OK.

Version 2.5_test2

Patch/test release to overcome problems with EEPROM Update on the MPEH platform.

Version 2.5

Handling of 1Gbit BIN files is now correct. The DLL now waits after the reset command has been sent, so auto boot with USB does detect the same target right after a download.

Version 2.4

Error, preventing boot on SGold2 systems (introduced in version 2.3), is fixed.
Error, preventing stable boot via USB, is fixed.

Version 2.3

Now support for NAND flash on the SGold3 (safe mode) platform.
External timeout set-up has effect now.
The result of the target-PC capability negotiation is now shown during download.
Additional EEP checksum error is now fixed.

Version 2.2

Problems with multi channel download are fixed.
Error, when using DEP/CFG files with long lines, is fixed.
Checksum error after EEP download is fixed.
Path length for DEP and CFG files are now 300 chars.

Version 2.1

Better detection of idle state, and when in idle no CPU power is used.

Optimized code for speed

Added 3 parameters to "IFWD_DL_set_dll_parameter()":

IFWD_DL_dll_parameter_skip_empty_blocks (faster downloads)
IFWD_DL_dll_parameter_faster_crc_method (faster downloads)
IFWD_DL_dll_parameter_lower_multichannel_CPU_load (less CPU usage)

Fixed problem when opening multiple USB ports

SGold 2 EBL is updated for better support of Sibley flash.

SGold 3 EBL is updated due to automatic detection of muxed or non-muxed bus.

Version 2.0

UTP SMS00360820 is resolved with this release.
Support for 'Enhanced protocol' where the PC and the target negotiate capabilities before download starts.
Protocol enhancements:
- Overall download speed is increased by sending write response before the actual write.
- DFFS file download speed is increased by avoiding the transmission and target side handling of packages containing only 0xFF as this is the value in the flash after erase anyway.
Instruction cache is enabled on SGold for faster execution.
General optimizations are made different places in the code.

Support for EGold Voice.
Support for external RAM on CS3 or CS4 on EGold Radio and Voice.

Generic support for both multiplexed and non-multiplexed flash interface on SGold3.

Version 1.22

PEC is disabled for EGold communication to fix rare download failure.
Flash handling is changed to fix delay with AMD devices

Version 1.21

The COM port driver will now no longer try to change parameters that the device says are unsupported. This fixes crash problems on devices that e.g. could not change baud rate. Updating EEPROM data has been made more robust. The DLL will now use 0% CPU time while no COM ports are open.

Version 1.20

Fixed crash problems when updating some EEPROM data.

Version 1.19

DLL Interface has changed to version 1.12. Enum types that are not int's have been removed from the interface, and replaced with basic ANSI C types. This is done to ensure compatibility with MSVC.

Made boot and COM port handling more robust, and COM1 is now supported again. Cleaned up source code to make the DLL code compliable in MSVC++6.0 as a library. The recently added support for SST FLASH chips has been temporarily removed to avoid stability issues.

The Download DLL code is now available as a MSVC++6.0 library stored in the "Download_DLL.zip" file under the "VisualStudio" folder. This folder contains both the MSVC projects that generated the library and a binary release and debug version of the library. A small console test application with source and executable is also stored there as a reference as to how the library could be used.

Version 1.18

Support for IFWD_coder DLL. This enables customers to protect their files from unauthorized download by giving the choice of dongle protection.

Version 1.17

Support for automatic download start mode is added.

Version 1.16

Support for static EEPROM update is added.
An error in the low-level AT command handling is fixed.

Version 1.15

EGold EBL is updated to read OTP flash area and to handle SLB lock/unlocked flag.
AT mode commands are implemented.
Error handling is updated for boot and comm handlers.

Version 1.14

EGold EBL is updated to fix download problems, related to size of last download data package.

Version 1.13

Function to read SW version data can now read from file without the need for COM-port open and connected target.
Function to force a HW reset on the target is implemented.

Version 1.12

Temporary fix for improving download speed.
Fixed in handling of binary download, upload and erase.

Older versions

For the versions before version 1.12 there have not been any release notes.