LECM 1.01-0 Release Notes

DATE:

September 30, 2016

BACKGROUND:

LECM GAP Programmer 1.01-0 is a new release of the Coder / Operating System for Woodward controls

COMPATIBILITY:

To use this version of GAP/Coder, you must use GAP Editor 3.11 or higher.

To use this version of GAP/Coder, you must use SOS 4.11 or higher.

To use this version of GAP/Coder, you must use Control Assistant 4.12 or higher.

To use this version of GAP/Coder, you must use Toolkit 5.2 or higher.

NEW FEATURES:

- This version of the Coder / Template is dedicated to the LECM platform only. The Product Release Strategy has evolved so that other platforms such as MicroNet, 2301, and AtlasII each have their own dedicated Coder and Template versions. Common GAP blocks that all platforms use are included in this Coder / Template version. However, platform specific blocks from other platforms are not included.
- UDS over CAN (ISO15765) Support (Woodward use only)
- Shared Memory Region Producer/Consumer
- PID OPTI
- Added the ability to disable Security when using the force boot jumper to load applications via BOOT_SEC_EN input on the STATUS_LECM. Use of this feature requires Hard Boot version 2.008 or greater, otherwise the boot security override will not be altered. The Hard boot version is now reported on the STATUS_LECM block HB_MAJ and HB_MIN outputs.

ISSUES:

The following Product Issue Database ("PID") issues and requests were addressed in 1.01-0:

Issue #	Description	Solution
18118	Add support for AI_PWM on LECM main speed inputs	AI_PWM block is now supported on the speed inputs
18064	Add support for LECM AI_EGO	AI_EGO can now be used on analog inputs 1-18.
14555	SYS_INFO	A request from the UPDATE_EE input on the SYS_INFO block is now latched and will be acted on even if request is changed back to FALSE before the save is initiated.
18063		The SH_MEM_PROD and SH_MEM_CONS blocks have officially been integrated with a tunable source address. Passwords have been removed.
18060	FAULT output	Fixed issue when the STATUS_x BOOL_OUT blocks are in a slower RG than one of the trigger outputs. The TRIG_OUT FAULT output would not work correctly.
18053	II — • I	Added the ability to change the SMTP port used when transferring a data log via EMAIL

Issue #	Description	Solution
18050		Fixed issue when the OUT_TYPE input comes from a name block at a slower rate group. TRIG_OUT would not function.
18008	XCP reset request response	Changed response to an XCP reset request to cause a ToolKit disconnect if RESET_ENABLE is set FALSE. A Generic Error is returned instead of Busy.
17992		When the Hard Boot is version 2.008 or greater, Boot Security when using the force boot jumper can be disabled if desired.
17981	Fix Cal curves settings in simulation	Fixed issue when trying to use values other than default.
17978		Added support for Data Access Based functions. IOLOCK and SAVE commands will work over XCP when using SID schema 22. GAP editor 3.11 or greater, Toolkit 5.2 or greater and SOS 4.11 or greater are required.
17971	LECM Analog output not accounting for offset correctly.	Fixed issue that was adding a small offset to the low end of the current range.
17970	Increased the number of resets allowed in the EVENT_MGR block	Increased allowed number of repeats to 1600
17969	Datalog email subject	The format of the resulting data log file is <email_sbj>_<year>-<month>-<day>_<hour>.<min>.<sec>.LOG</sec></min></hour></day></month></year></email_sbj>
17959	LECM Number of AI_INTRVL blocks allowed	Fixed Coder enforcement of a maximum of 4 AI_INTRVL blocks. It was being performed too late in the process to be effective.
17955	J1939 Address claim issue.	Fixed issue with J1939 address claim.
NA	Updated to LECM FPGA image 2.041	This image update modifies some of the FAULT bits on the TRIG_OUT block and the DIAG_PULSE output on the AO_PWM_FLT block.
NA		Includes misc. bug fixes and adds LED blink codes while programming: Main (Soft Boot): CPU LED (in order of priority) 1. Flashes GREEN 1Hz, 50% DC rate while FPGA is being programmed 2. Solid GREEN ON once FPGA programming has completed Remaining LED's (RS232/485/CAN1/2/3) 1. Flashes GREEN in a cyclic pattern while application is being programmed 2. All LEDs go solid GREEN ON once application programming has completed

UNSUPPORTED BLOCKS and FUNCTIONALITY:

The following blocks may be available in the Template and GAP Editor, but are not supported for customer use in the LECM 1.01-0 release version of the Coder (compiler):

- AN_OUT
- <u>UDS_CAN</u>
- UDS DID ORDER
- <u>UDS_SECURITY</u>
- <u>UDS_SVC_10</u>
- <u>UDS_SVC_11</u>
- <u>UDS_SVC_22</u>
- <u>UDS_SVC_27</u>
- UDS_SVC_2E
- <u>UDS_SVC_31</u>
- SPI_RD
- SPI_WR
- RT_CAN_NTW
- FBUS functionality is not supported in LECM
- EGD functionality is not supported in LECM
- Modbus Serial RTU multi drop is not supported

PART NUMBERS:

Version 1.01-0

GAP/Coder Part Number: 9927-2523