

<b>FDI</b>	<b>ENGINEERING CHANGE ORDER</b>	<b>ECO NO: 17-007</b>
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<b>ASSEMBLY PN</b>	<b>CURRENT REV</b>	<b>NEW REV</b>
SYG-70CP-BA	1.0	1.2

OVERVIEW OF THE CHANGE:

- Program Ubiquios keys into board assemblies during production (unique key per unit).
- Program Demo Software into the board assemblies during production.
  - o OOB Demo is called: "Sensor to Cloud v1.00"
- Update production test software to use the latest drivers, test files and Data Flash.

DESCRIPTION OF CHANGE:

1. Update production test project to use shared bus framework for touchscreen.
2. Add SYG\_Data Flash Driver to project.
3. Add NVSettings App code to project.
4. Add Test\_SYG\_SDRAM test files to project.
5. Add Flash HP peripheral driver to project's thread menu (required to use Data Flash).
6. Change LCD power pin to be output low initially to prevent LCD power being disabled.
7. Increase UART buffer and input QUEUE size to handle sending 200+ byte commands onto the serial console.
8. Added new settings structure for last 2 blocks (128 bytes) of Data Flash that contains the following:
  - a. Ubiquios key
  - b. Ubiquios Key number 9 bytes (000000001, etc)
  - c. Valid configuration byte to store flags
  - d. HW Version Major and Minor bytes (hard coded to 1.0 for now)
  - e. Placeholder for MAC address, 6 bytes, initialized to 0. (not used)
  - f. Placeholder for Unit serial number, 6 bytes, initialized to 0. (not used)
  - g. 5 bytes reserved
9. Add new program key function to program the settings structure into Data Flash
  - a. Now, this function and structure are not in Data Flash or NVSettings driver, but only in the FCT project itself. Later, we will give users access to the data structure, once we have user code that makes use of HW revision, serial number, MAC address, etc. Even without knowing the data structure, the user can use the UB\_KEY as it is the first 99 bytes of this region.
10. Added UB\_KEY console command to call the program key function to program keys during production. Same functionality as the one used in uEW-GW1 FCT.
11. Add new INI entry to PC FCT SW to program final demo SW using J-Flash call at end of FCT.

Reason for change: 1. Program ubiquiOS keys during production 2. Program Out of Box Dem into assembly during production. 3. Use latest drivers and test software into production programming.			Disposition/Affectivity	
			Use as is	
			Rework to ECO	
			Scrap & Rebuild	
			Record Change Only	
Prepared by:	BF	Date:	06/16/2017	
Approved by:	MH	Date:	06/12/2017	
Approved by:	TBE	Date:	06/15/2017	
Approved by:	TD	Date:	06/12/2017	
Approved by:	AG	Date:	06/15/2017	

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12. Added Sensor to Cloud v1.00 binary into J-Flash folder to program into units.

13. Refer to User's Manual for details of Data Flash data structures and access to the ubiquiOS Key.

REVISION INFORMATION

Sub-Assembly	Current Rev	New Rev
Hardware Signoff	1.0	1.0
Schematic\BOM	1.0	1.0
PCB	1.0	1.0
<b>Software Checklist</b>	<b>1.0</b>	<b>1.1</b>
TO136	1.0	1.0
FCT SW (increase BA Rev ONLY when change affects – BA)	<b>1.0</b>	<b>1.1</b>
OOB Demo	<b>None</b>	<b>1.0</b>
SD Card Image	None	None

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