

	Doc or ECO #:	ECO-70160-F-001	Date:	11/7/2022	Author:	aeg
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	11/7/2022	Quality Approval	aeg

P/N #:	70160-F	Effective Date:	November 7, 2022
Title:	Update firmware for runtime logging		

1.0 Purpose / Summary

Greensea required an easier method to read s/n to enable runtime logging.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
70160F	Power module firmware	☐	☐	☒	1.3.3

3.0 Detail

The US Navy requested a feature to allow for better collection of runtime data.

It was determined that the power module S/N would be the reference key for that data.

A utility CSR register command was added to retrieve the s/n. more easily

This will eventually be implemented on all firmware.

This release is fully backwards compatible.

Greensea revisions are also backwards compatible with older firmware, they will just not log the power module S/N with repair and maintenance (RAM) data

4.0 Disposition of Material

All systems can be upgraded.

Automated tools have been updated.

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5.0 Action Items

Action	Department	Acknowledgement Initials
Update firmware on repos	ENG	aeg
Verify auto tools are using the correct firmware	ENG	aeg
Double check firmware version on navy systems	ENG	aeg

6.0 Modified / Referenced Documents:

Document	Current Revision

7.0 Revision History

Date Revised (mm-dd-yyyy)	Location of Change (section, paragraph no., step no., etc.)	Description of Change Made	Name of Person making the Change
11/7/2022		Init	aeg