

PESA RCP Panel Server Main Application Version 2.2

Product Functional Definition and Validation

Written By:	Richard Hunter
Revisions By:	
Version	0.0.1
Date	4/27/2014

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1.0 Introduction

The purpose of the document is to perform validation of version 2.2 of the RCP Panel Port Server main software application.

2.0 Functional Description

Version 2.2 of the RCP Panel Port Server main software application implements the changes listed below:

1. Sending Panel Status Notifications to Standby PERC 3000 after RCP Panel Server gets logged into the Standby PERC 3000 (after the RCP Panel Server registers for notifications).
2. Added code to handle receiving LCHIP II CRC errors (communications between the FPGA and ARM 9). NOTE: three retries are made before giving up.
3. Diagnostics messages added to indicate both a LCHIP II CRC error and the recovery from that CRC error.

2.1 System Diagram

NA

2.2 Functional Diagrams

NA

2.3 Control interfaces and protocols

P2 protocol

2.4 Electrical Interfaces

Ethernet

2.5 System power

NA

3.0 Controls

There are no controls for the Panel Port Server

3.1 GUI Controls

Cattrax.

3.2 System Controls

Interface port and detailed list of commands

3.3 Switches and Jumper settings

NA

4.0 Validation

4.1 System configuration

Complete listing of all hardware and documentation used for validation

Hardware under validation

Hardware	Part Number	Agile Revision	Agile Description
RCP Panel Server	RCP-PANEL-SERVER	D	RCP-PANEL-SERVER ADAPTS RCP PANELS TO PERC3000 CONTROLLER SUPPORTS 32 PANEL

Software / FPGA code

Hardware	Part Number	Agile Revision	Agile Description
RCP-PANEL-SERVER	81905608450	H	RCP PANEL SERVER SOFTWARE APPLICATION IMAGE SW V2.2

Supporting hardware

Hardware	Part Number	Agile Revision	Agile Description
PERC3000	PERC3000	D	PERC3000 SYSTEM CONTROLLER SINGLE 1RU SERVER INTERNAL P/S
Touch 72 panel	TOUCH72LCD	C	TOUCH72LCD 72 LCD SWITCHES WITH TOUCHSCREEN W P/S 2RU NETWORK REMOTE PANEL

4.2 System Power

NA

4.3 Control Verification

4.3.1 GUI Controls

Test results for all listed GUI controls.

Settings Page	Function	Status
Panels	Address/ID	Verified OK
Panels	Name	Verified OK
Panels	Type	Verified OK
Panels	IP Address	Verified OK
Panels	Description	Verified OK

Equipment used

type	Serial Number	MAC Address	Main App	SW Boot	CPLD
PERC3000	LAB PERC3000 Too	D0-67-E5-EA-6B-AE	1.7	6.0.8	
PERC3000	LAB Imaging PERC3000	D4-A3-52-C2-40-F5	1.7	6.0.7	
PMFC	652397A12441391	00-0B-3A-00-09-E9	5.5	1.4	1.2
PMFC	652397N12441371	00-0B-3A-00-09-EF	5.5	1.4	1.2
RCP-PANEL-SERVER	653343C14030084	00-0B-3A-00-14-19	2.2	0.1	1.3

Control panels used

Panel type	Status
RCP-128X	Verified OK
RCP-64X	Verified OK
RCP-CSD	Verified OK
RCP-GPI	Verified OK
RCP-LCXY	Verified OK
RCP-MB2	Verified OK
RCP-MLDT	Verified OK
RCP-MLTP	Verified OK
RCP-MP32	Verified OK
RCP-MP32D	Verified OK
RCP-STAT1	Verified OK
RCP-STAT2	Verified OK

4.3.2 System Controls

Notes:

1. All operations confirmed using Cattrax 3.4.2 rev5418.
2. performed multiple cold starts and configuration downloads with good results for the RCP panel server and all connected panels at all times.

4.3.3 Switches and Jumper settings

NA

4.4 Electrical verification

NA

4.5 Mechanical verification

NA

4.6 Thermal verification

NA

4.7 Agency verification

NA

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