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1
2 @brief      Mission Statement for upcoming onsite technical presentation
3 @details    Preparation for generation
4 @auth       Justin Reina
5 @rev        6
6 @date       7/20/18
7
8
9 @section    Project Selection
10            Contract work for Ergsense - HW, FW & Design (DTECTS, 2017)
11
12 @section    Mission Statement
13            Description of contract work (Ergsense) where hardware, firmware and design work
14            helped stabilize an existing proof-of-concept and move it forward towards product
15            release.
16
17 @section    Presentation Contents
18            1 Challenges & Needs (1)
19            2 Design Procedure (2)
20            3 Development Methodology (3)
21            4 Overcome Challenges (1)
22            5 Deliverable & Results (2)
23            6 Learnings & Growths (1)
24            Total (10)
25
26 @section    Statistics
27            5-6 people
28            60 min minute technical presentation
29            Deep Dive Potential for staff
30
31 @section    Key Points
32            Highlight hardware experience
33            Show direct value to team, by example
34
35
36 //*****//
37 //                      SECTIONS                      //
38 //*****//
39 @section    Challenges & Needs
40            Stabilized Firmware Architecture
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42
43            Board Revisions
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45
46            PoC Progression, Arduino towards release
47
48            Feature Integration
49            DEBUG PORT
50            SERIAL PORT
51            JTAG
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53 @section    Design Procedure
54            Needs Identification
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56
57            Firmware Development
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60            Board Development
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63            Contract Completion & Transfer
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ABLE TO RELEASE ON SPIKING HW V1.0
PYTHON VM

"HOW YOU STATED THE ORIGINAL, HOW DO
WE HAVE PROOF PROVEN?"

- DISCONNECT
"AS LONG AS I'M KNOWING THERE
WE'RE IN 1998 GENERATION
THIS HORROR"

- PUTTING ORDER
TO ALL READS
- DOC FOLDER

- EAGLE LIBRARY
INTEGRATION
- ALL READS STILL IN
V1.0

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70 @section Development Methodology
71 Documentation
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74 Presentation
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77 Code Syntax
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80 Development Validation
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83 PoC Form
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86 Schematic Examples
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89 Content Transfer to Ergsense
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91
92 Revision Control
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95
96 @section Overcome Challenges
97 Unmet customer needs
98
99
100 Work scope identification
101
102
103 Espressif
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105
106 Satisfying ambitious, abstract design needs
107
108
109
110 @section Deliverable & Results
111 Schematics
112
113
114 Documentation
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116
117 Board Design
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119
120 Espressif bare-metal scope
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122
123 Roadmap establish
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125
126 Procedure Reference
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128
129 GitHub
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TEST POINTS
ADDED & NEEDED

PICTURES
- REACH OUT

RESTRICTIONS
- NONE AT PRESENT

IOT SENSOR FOR
MACHINERY &
OPERATIONS REPORT

PRICE (WILL NOTE)
SEND UNPROVEN REPORT

DEVELOPING INTERFACE (C-PIN MOVING TO JTAG)

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@section Learnings & Growths
Communication

Customer Needs Identification

Risk Identification & Mitigation

Results Delivery to Ambitious Customer

@section Things of Value to Present
Schematics (DTECTS_hw/ work)

Firmware Reference (Examples Espressif work?)

Design Docs (Spec sheet, path forward)

Work Sync & Integration (Convergence of work flows)

Project Org (DTECTS_hw org)

Content Org & Sharing (GitHub)

Challenges & Learnings (Espressif OTM)

SETTING UP REPO & STRUCTURE

SERIAL PORT, HE WANTED EVERYTHING
R223, 485, 501-12, → MOVED TO MODULE
OCCUPY & CNO
ANALYSIS OF PCA CIALUM
TO COMPLETE
DIA VALUES
RESEARCH TO JUSTIFY
STILL PRESENT
"WE WOULD HAVE BEEN SEARCHING FOR
WILL OTHERWISE"