Bermondsey Electronics LTD

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Software Release Notes

[Playback / Playback_393]

2. HISTORY

Full Name	Date	Describe	Version
Joel DEROCHE	01/12/2023	Creation	V01.01
Joel DEROCHE	12/12/2023	Update	V01.02
Peter Wrigley	19/12/2023	Update	V01.03

3. SOFTWARE IDENTIFICATION

This software identified as PlayBack_393 written for the project [*PR0089 / Playback_393*]. This software was developed for the PlayBack_393

This software was developed for the following hardware:

1. PCB Identification : nRF5340 DK
2. CPU Name: NRF5340
3. CPU Reference: NRF5340_xxAA_APP

A. VERSION CONTROL

This software version [V01.03] was identified by the TAG : [*PLAYBACK_393_V01.03*].

Location :

https://github.com/BermondseyElectronics/Playback_393/tree/V01.03

Release:

https://github.com/BermondseyElectronics/Playback_393/releases/tag/Playback_393_V01.03

1. Git Commit HASH: [59ab3e28fc3d47e51d570f7c3066de031a2586f3]
2. Git TAG: *PLAYBACK_393_V01.03*

B. DEVELOPMENT ENVIRONNEMENT

For Microchip Product the configuration bits must contains:

This software was developed with the followings tools:

1. IDE Information:
   a. Name: Visual Studio Code
   b. Version: 1.85.1
   c. Compiler Version: ncs v2.4.2
   d. Assembler Version: -
   e. Linker Version: -

2. Operating System Information:
   a. Edition : Window 11
   b. System type : *64 Bit operating system, x64-based processor*

Feature ID	Description	SOFTWARE VERSION
1	PLAYBACK Firmware Deliverable 1	V01.02
12	Battery readout manager not implemented	V01.02
8	Power Management not implemented	V01.02
7	LEDs control not implemented	V01.02

Software Release Notes

Enhancements ID	Description	SOFTWARE VERSION

Fix #ID	Description	SOFTWARE VERSION
15	JScope & RTT RTT communication blocking software when JTAG not plugged	V01.00
16	IMU Thread Blocking - Infinite polling on Data Ready Line	V01.02
18	Boken hex file for clean program	V01.03

7. KNOWN ISSUES AND PROBLEMS

Issue #ID	Description	SOFTWARE VERSION
14	Code protection not implemented	V01.00
13	Feedback manager not implemented	V01.00
17	Fault Indication • What specific faults need to be monitored by the LED indicator? • How should the LED behave in different scenarios, such as during a low battery ? • Can the fault be self-recovered, or is it a permanent malfunction? • What are the criteria to validate or invalidate a fault	V01.02

1. NOTES

BATTERY CHARGER AND MEASUREMENT

The Battery Charger pin has been selected to be P1.10 on the board, Active HIGH

The current setting let us measure a voltage from 0v to 3.6V pin P0.07 with a 100% towards 3.6v

- Low battery Trigger < 15%
- Low batter Off Trigger >30%

Interpolation Curve

```
{ Millivolts, Level },
{ 2100,    0 },
{ 2600,    5 },
{ 3020,   15 },
{ 3150,   80 },
{ 3360,   95 },
{ 3600,  100 }
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LED

- LED 1 : RED
- LED 2 : BLUE
- LED 3 : AMBER
- LED 4 : GREEN