|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CT\_01 | ADC Test Code |  |  |  | T |  | None |
| CT\_02 | Audio Switch Test Code |  |  |  | T |  | None |
| CT\_03 | Setting Button Test Code |  |  |  | T |  | CT\_01 |
| CT\_04 | Main µC Test Code |  |  |  | T |  | CT\_02, CT\_03 |
| CT\_05 | Process Implement in µC |  |  | D |  |  | PT\_04 |
| CT\_06 | Main Program |  |  |  | T |  | ET\_06, CT\_01, CT\_04, CT\_05 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Name | Main Program | | Test Number | CT\_06 | | | |
| Requirement(s) Tested | | 3.1, 4.1, 5.1, 5.4 | Verification Method | I | A | D | T |
| Test Setup | | Integration of ET\_06, CT\_01, CT\_04 and CT\_05  ATmega328PB  Atmel Studio (Debugger) | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step | Action (Attach test data, diagrams, etc. as appropriate) | Expected Result | Observed Result | Pass  Fail |
| 1 | Verify CT\_01, CT\_04 and CT\_05 | See ET\_06, CT\_01, CT\_04, CT\_05 | See ET\_06, CT\_01, CT\_04, CT\_05 | Pass |
| 2 | Read the ADC Pin Input  (ADC -> PINC5) | The ADC is read and stored to a variable | The ADC is read and stored to a variable | Pass |
| 3 | Test High/Med/Low Sensitivity Buttons to Change Settings | 3 LEDs are setup to indicate the Thresh Sensitivity Mode. | Red LED = Low  Yellow LED = Medium  Blue LED = High | Pass |
| 4 | Test the Reset Button to see of the device restarts | The device restarts the program. | The device restarts the program. | Pass |
| 5 | Test the Power Button to see if the device sleeps and reboots if pressed again. | The auxiliary ports are connected automatically when the device is off and restarts when pressed again | The auxiliary ports are connected automatically when the device is off and restarts when pressed again | Pass |
| 6 |  | Loud noise audible. |  |  |
| 7 |  |  |  |  |

Comments

DateTest EngineerWitness