**ESP32-CAM – Battery Runtimes** 18th October 2024

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Generic ESP32-CAM - Variant 1** | | |  | **Generic ESP32-CAM - Variant 2** | | |  | **AI Thinker ESP32-CAM** | | |
|  | | |  | *A close up of a circuit board  Description automatically generated* | | |  | *A close up of a device  Description automatically generated* | | |
|  |  |  |  |  |  |  |  |  |  |  |
| **Voltage** | **ADC** | **Runtime** |  | **Voltage** | **ADC** | **Runtime** |  | **Voltage** | **ADC** | **Runtime** |
| 6.10v | 1949 | 0.00 HRS |  | 6.09v | 1924 | 0.00 HRS |  | 6.25v | 2051 | 0.00 HRS |
| 5.56v | 1697 | 0.50 HRS |  | 5.62v | 1698 | 0.50 HRS |  | 5.70v | 1795 | 0.50 HRS |
| 5.32v | 1602 | 1.00 HRS |  | 5.35v | 1587 | 1.00 HRS |  | 5.45v | 1673 | 1.00 HRS |
| 5.18v | 1553 | 1.50 HRS |  | 5.19v | 1525 | 1.50 HRS |  | 5.34v | 1617 | 1.50 HRS |
| 5.05v | 1504 | 2.00 HRS |  | 5.05v | 1480 | 2.00 HRS |  | 5.22v | 1574 | 2.00 HRS |
| 4.90v | 1466 | 2.50 HRS |  | 4.90v | 1438 | 2.50 HRS |  | 5.10v | 1534 | 2.50 HRS |
| 4.75v | 1437 | 3.00 HRS |  | 4.78 | 1408 | 3.00 HRS |  | 5.00v | 1500 | 3.00 HRS |
| 4.64v | 1408 | 3.50 HRS |  | 4.68 | 1381 | 3.50 HRS |  | 4.90v | 1472 | 3.50 HRS |
| 4.54v | 1378 | 4.00 HRS |  | 4.58 | 1355 | 4.00 HRS |  | 4.82v | 1449 | 4.00 HRS |
| 4.40v | 1355 | 4.50 HRS |  | 4.44v | 1325 | 4.50 HRS |  | 4.73v | 1422 | 4.50 HRS |
| 4.20v | 1316 | 5.00 HRS |  | 4.32v | 1297 | 5.00 HRS |  | 4.64v | 1399 | 5.00 HRS |
| 4.00v | 1270 | 5.50 HRS |  | 4.16v | 1267 | 5.50 HRS |  | 4.54v | 1373 | 5.50 HRS |
| 3.60v | 1225 | 6.00 HRS |  | 3.78v | 1214 | 6.00 HRS |  | 4.44v | 1355 | 6.00 HRS |
| 3.40v | 1115 | 6.16 HRS |  | 3.40v | 1076 | 6.50 HRS |  | 4.32v | 1316 | 6.50 HRS |
|  |  |  |  |  |  |  |  | 4.20v | 1281 | 7.00 HRS |
|  |  |  |  |  |  |  |  | 3.95v | 1234 | 7.50 HRS |
|  |  |  |  |  |  |  |  | 3.53v | 1145 | 8.0 HRS |
|  |  |  |  |  |  |  |  | 3.30v | 1086 | 8.16 HRS |
|  |  |  |  |  |  |  |  |  |  |  |
| **Total Runtime:** 6 Hours, 10 Minutes | | |  | **Total Runtime:** 6 Hours, 30 Minutes | | |  | **Total Runtime:** 8 Hours, 10 Minutes | | |
| ***Note:*** *AI Thinker board clone - has a distinctive circle dot next to ESP32-CAM text on the PCB. This PCB has horizontal interference lines showing on the camera stream. Made in China.* | | |  | ***Note:*** *AI Thinker board clone - board has proper shielding and good quality PCB components with no camera interference. Made in China.* | | |  | ***Note:*** *Original AI Thinker board, increased run time due to production quality and components used in manufacture.* | | |