OpenOne SPI protocol

Opensolar.io

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Transmit (ESP -> ST)

Transmit number of bytes = 12

|  |  |  |  |
| --- | --- | --- | --- |
| Byte |  |  |  |
| 0 | Roll motor | Mode | 0 = BRAKE, 1 = CW, 2 = CCW, 3 = COAST |
| 1 | unused |  |
| 2 | speed | 0 to 65535 (max speed) |
| 3 |
| 4 | Pitch motor | Mode | 0 = BRAKE, 1 = CW, 2 = CCW, 3 = COAST |
| 5 | Unused |  |
| 6 | Speed | 0 to 65535 (max speed) |
| 7 |
| 8 | Control | Digit 0 | 1 to 9 ( led flash first digit) |
| 9 | Digit 1 | 1 to 9 ( led flash second digit) |
| 10 | bits | Bit 0 : 0 = STANDBY, 1 = RUN |
| 11 | unused |  |

Response (ST -> ESP)

Response number of bytes = 12

|  |  |  |
| --- | --- | --- |
| Byte |  |  |
| 0 | Hall #1 | Adc value (0 to 4095) |
| 1 |
| 2 | Hall #2 |  |
| 3 |
| 4 | Hall #3 |  |
| 5 |
| 6 | Hall #4 |  |
| 7 |
| 8 | Status |  |
| 9 |
| 10 | unused |  |
| 11 | unused |  |