

## ROBO Interface LED Error Codes

When the red Error-LED is blinking or permanently on, a serious error occurred. The LED is permanently on when the processor does not work anymore (e.g. because of the power supply voltage being too low). When the Error LED is blinking, the LEDs for Prog2, Prog1, USB, COM and IR show the following error codes:

| Error    | Prog2    | Prog1    | USB      | COM      | IR       | Description  |
|----------|----------|----------|----------|----------|----------|--|
| on       | X        | X        | X        | X        | X        | Processor does not work. Power supply Voltage too low?   |
| on       | on       | on       | off      | off      | on       | Directly after switching on the interface: battery empty   |
| blinking | off      | off      | off      | off      | on       | Power-on-error: internal RAM-test-1  |
| blinking | off      | off      | off      | on       | off      | Power-on-error: internal RAM-test-2  |
| blinking | off      | off      | off      | on       | on       | Power-on-error: internal RAM-test-3  |
| blinking | off      | off      | on       | off      | on       | Power-on-error: external RAM-test-1  |
| blinking | off      | off      | on       | on       | off      | Power-on-error: external RAM-test-2  |
| blinking | off      | off      | on       | on       | On       | Power-on-error: external RAM-test-3  |
| blinking | off      | on       | off      | off      | off      | Power-on-error: bootloader: please contact service   |
| blinking | off      | on       | off      | off      | on       | Power-on-error: firmware: please contact service   |
| blinking | off      | on       | off      | on       | off      | Power-on-error: Power supply voltage for firmware-update is too low  |
| blinking | off      | blinking | off      | off      | on       | Power-on-error: firmware: press "Port " and "Prog" at the same time for two seconds. Last firmware-update will be repeated.                                      |
| blinking | off      | blinking | off      | off      | blinking | Power-on-error: firmware: By pressing "Port" and "Prog" at the same time flashing can be repeated. Then release buttons to start firmware-update in safety mode. |
| blinking | off      | off      | off      | off      | blinking | Program error: unknown command-1   |
| blinking | off      | off      | off      | blinking | off      | Program error: unknown command-2   |
| blinking | off      | off      | off      | blinking | Blinking | Program error: unknown command-3   |
| blinking | off      | off      | off      | off      | off      | Firmware update error by deleting Flash  |
| blinking | off      | off      | blinking | off      | off      | Internal error I1  |
| blinking | off      | off      | blinking | off      | blinking | Internal error I2  |
| blinking | blinking | blinking | off      | off      | X        | Firmware update error, please contact service  |

X= undefined condition