Inhaltsverzeichnis

The **„pow, run, stop, err"** are system leds.

The **„L1, L2, L3** e **L4"** are user leds.

"System leds" alerts

Legend:

 Led ON

 Led OFF

 Led flashing

Led	Color	State	Description
pow	Green		Device ON
			If it is the only led on, reports the status of CPU reset
run	Green		RUN state of the CPU
			READY state of the CPU
stop	Yellow		If the **pow** led is in ON, reports the status of CPU STOP If the **pow** led is in OFF, reports the status of CPU BOOT
err	Red		If the **pow** led is in OFF, report an hardware error. To see the section Hardware error codes If the **pow** led is in ON, the flash number report the error type. To see the **err** led report section

Err led alerts

N° flashing	Error	Description	Recommended operations
1	**Bus error**	Bus not configured as described in the application.	To verify the correspondence between the configuration of the QMOVE application (BUS section of the configuration unit) and that of the productr (cards available in the BUS).
2	**CheckSum Error**	The integrity check on the retentive variables has failed. (To see the Reset Error Checksum chapter)	It is necessary to restore data from a backup machine (file with DAT extension) or clear the error with the function of the system and reintroduce the values manually.
3	**Index Out of Bound**	Array index is pointed to a nonexistent element	With Qview environment you can open the editor of a unit and with the „Edit→Go to PC" command you see the line that caused the error. Typically the value used as the index has a value less than 1 or greater than of the array size.
4	**Program Over Range**	The selection index program within the DATAGROUP has attempted to access a non-existent program.	With Qview environment you can open the editor of a unit and with the „Edit→Go to PC" commnand you see the line that caused the error. Typically the value used as the index has a value less than 1 or greater than of the array size.
5	**Step Over Range**	The selection index step within the DATAGROUP has attempted to access a non-existent step.	With Qview environment you can open the editor of a unit and with the „Edit→Go to PC" commnand you see the line that caused the error. Typically the value used as the index has a value less than 1 or greater than of the array size.
6	**Division By Zero**	The denominator of a division operation of the user program has value zero.	With Qview environment you can open the editor of a unit and with the „Edit→Go to PC" commnand you see the line that caused the error.
7	**Syntax Error**	The application program has an invalid instruction	his error may appear because the program counter met the QCL END statement.
8	**Watch Dog Error**	A CAN module is not working properly, or an expansion card has a hardware problem.	With Qview environment you can open the „Monitor→Bus" panel and in the „Watchdog Bus" column shows the card that caused the problem.
9	**Stack Error**	The application program has used all levels of subroutine call permissions	With Qview environment you can open the editor of a unit and with the „Edit→Go to PC" commnand you see the line that caused the error. Analyze the flow of execution of the unit. The nestings of subroutines have a limit, beyond which it generates this error.

Hardware error codes

If a malfunction is detected when starting of any peripheral devices, the system hangs and the error is reported by the blinking of the only led err while all the other leds remain OFF. In the table you can see the number of flashes that indicates the error:

Number of flashes	Error
1	Display
2	FPGA
3	Media
4	Bootloader
5	FW
6	Bus
7	*Inactive signal*
8	*Inactive signal*
9	Exception

.

 Each of these reports indicates a serious error. The product must be sent to the customer support QEM.

"User Led" Alerts

Led	Color	Description
⬤ L1 ⬤ L2 ⬤ L3 ⬤ L4	Yellow	Programmable in the user program system variable QMOVE:sys003 and used by system functions