Technical Reference
020-103556-02

MicroTiles LED
Status System

CHKISTIE®

NOTICES

GENERAL

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Warranty

Products are warranted under Christie's standard limited warranty, the details of which are available at *https://www.christiedigital.com/help-center/warranties/* or by contacting your Christie dealer or Christie.

REGULATORY

The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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ENVIRONMENTAL

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The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol 🗑 means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, there are separate collection systems for used electrical and electronic products.

If printing this document, consider printing only the pages you need and select the double-sided option.

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Notation

Learn the hazard and information symbols used in the product documentation.

⚠ (red)	Danger messages indicate a hazardous situation which, if not avoided, results in death or serious injury.
⚠ (orange)	Warning messages indicate a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ (yellow)	Caution messages indicate a hazardous situation which, if not avoided, could result in minor or moderate injury.
❗ (blue)	Notice messages indicate a hazardous situation which, if not avoided, may result in equipment or property damage.
📝	Information messages provide additional information, emphasize or provide a useful tip.

Content

MicroTiles LED status system

This guide contains information about the values and fault conditions that can be reported by the status system for the wall controllers on MicroTiles LED devices.

The wall controller status system is accessible through both the web user interface and the Christie serial protocol Ethernet port 3002. The Octroller status system is not accessible through the serial protocol. Therefore, the wall controller status system contains status items specific to the wall controller as well as entire system status entries.

For example, if an Octroller has a temperature warning, it sets its temperature status to a warning state and the Octroller LED blinks yellow. The wall controller monitors the overall temperature status of all devices in the system and when it sees this warning, it sets a system temperature warning `(SST +SYST 176)`. From the wall controller web user interface the status of the Octrollers can be viewed to find the one with an issue.

The status system provides an overview of the device at the current point in time. It contains a number of groups, which contain a set of status items. Each status item represents a component or sub-component of the system. Obtain specific details regarding a warning or error for a status item using the log system.

The numbers next to the status items in this guide correspond directly to the status item index within each group.

Product documentation

For installation, setup, and user information, see the product documentation available on the Christie website. Read all instructions before using or servicing this product.

1. Access the documentation from the Christie website:

   - Go to this URL: *http://bit.ly/2DE9cnu* or
     https://www.christiedigital.com/en-us/digital-signage/products/led-tiles/microtiles-led.

   - Scan the QR code using a QR code reader app on a smartphone or tablet.

2. On the product page, select the model and switch to the **Downloads** tab.

Related documentation

Additional information on this product is available in the following documents.

- *MicroTiles LED Product Safety Guide (P/N: 020-102824-XX)*
- *MicroTiles LED Installation and Setup Guide (P/N: 020-102825-XX)*
- *MicroTiles LED User Guide (P/N: 020-102835-XX)*
- *MicroTiles LED Specifications Guide (P/N: 020-102836-XX)*
- *MicroTiles LED Serial Commands Guide (P/N: 020-103050-XX)*
- *Replacing LED modules in a MicroTiles LED array (P/N: 020-103059-XX)*
- *Removing the MicroTiles LED chassis (P/N: 020-102670-XX)*

Status system states

The status system has three states to indicate the health of the device.

	OK	No known issue
	Warning	A problem with this item should be addressed.
	Error	A problem with this item prevents the system from properly displaying video or turning on the system.

Wall controller status system items

The following sections provide the status system items for the wall controllers.

Configuration Group (SST+CONF?)

The Configuration group provides values and fault conditions for configuration-related items for the wall controller.

#	Status	State	Value	Description
0	Device Model		<model>	Displays the device specific model information.
			Unknown	Cannot read the device model.
			Not Specified	Indicates no device model information is available.
1	Device S/N		<serial number>	Displays the serial number of the device.
			Unknown	Invalid or no serial number information is available.

#	Status	State	Value	Description
3	Device Build Date		<YYYY>/<MM>/<DD>	Displays the build date of the device.
		🟧	Unknown	Invalid or no build date information is available.

System Group (SST+SYST?)

The System group provides values and fault conditions relating to the system and its health for the wall controller.

#	Status	State	Value	Description
9	Built-In Self Test		N/A	The built-in self test has not been executed yet.
			PASS	The built-in self test completed successfully.
		🟧	FAILED	The built-in self-test did not complete successfully.
10	System ID Board		OK	Properly detected and initialized the board.
		🟥	Communication Fault	Cannot communicate with the board.
		🟥	Invalid Data	The information on the board is missing or corrupted.
12	Keypad Display		Auto Detect	The system is attempting to detect the presence of the keypad display.
			Programming	Programming the keypad display with the correct firmware.
			OK	Properly detected and initialized the keypad display.
		🟧	Detection Fault	Cannot detect the keypad display.
		🟧	Unexpected Behavior	The keypad display is not responding correctly.
30	Main Control Board		OK	The main control board has been initialized at least once and is known to be OK.
		🟥	Initialization Fault	Cannot successfully initialize the main control board.
118 119	QSFP+0 QSFP+1		OK (Active)	The QSFP connection for port 0 is present.
			OK (Copper)	The Copper QSFP connection for port 0 is present.

#	Status	State	Value	Description
			OK (Unknown)	An unknown type of QSFP connection for port 0 is present.
			Not Present	Cannot detect the QSFP connection for port 0.
			Link Down	Cannot detect a device on the other end of the QSFP connection on port 0.
		▮	Device Error	The QSFP connection on port 0 experienced a device error with an active signal.
		▮	Disabled	The QSFP connection was manually disabled.
		▮	Auto Disabled	The QSFP connection was disabled due to generic communication errors.
		▮	Auto Disabled (Link Toggle)	The QSFP connection was disabled due to the link toggle communication errors.
		▮	Auto Disabled (Error Toggle)	The QSFP connection was disabled due to error toggle communication errors.
		▮	Auto Disabled (Bad Cable)	The QSFP connection was disabled due to a bad cable.
120	Network Topology		Closed	Indicates the system array is in a closed loop configuration.
		▮	Open	Indicates the system array is in an open loop configuration.
121	Showing Secondary Wall Controller		N/A	Cannot detect any Octrollers in the system.
			No	The system is not showing the video from the secondary wall controller.
		▮	Yes	An Octroller in the system is showing the video from the secondary wall controller.
122	Primary Wall Controller		OK	Indicates the current configuration has only one primary LED wall controller.
		▮	Missing	Cannot detect a primary LED wall controller in the current configuration.
		▮	Two Primary	Detects more than one primary LED wall controller in the current configuration.

#	Status	State	Value	Description
123	Wall Controller Count	☐	\<number>	Displays the number of LED wall controllers connected in the current configuration.
124	Octroller Count	☐	\<number>	Displays the number of Otrollers connected in the current configuration.
125	Tile Count	☐	\<number>	Displays the number of tiles connected in the current configuration.
142	Wall Power	☐	On	All connected tiles are powered on.
		☐	Off	All connected tiles are powered off.
143	Pixel Pitch	☐	\<value>	value = Pixel pitch of the system. Indicates the pixel pitch is OK and matches across the system.
		☐	Unknown	Cannot determine the pixel pitch information.
		🟧	Mismatch	Indicates the pixel pitch is mismatched in the system and the system is not designed to operate like this.
146	SDVOE IP Address	☐	\<IP address>	Displays the SDVOE IP address.
		☐	Unknown	Cannot determine the SDVOE IP address.
175	Power Consumption	☐	\<power>W	Displays the system power consumption in Watts.
		☐	N/A	The power consumption of the system is currently not available.
176	System Temperature	☐	OK	Indicates all device temperatures are OK.
		🟧	Warning	Indicates some device temperatures are in a warning state.
		🟥	Critical Fault	Indicates some device temperatures are at a critical fault. The device may automatically shut down if a critical fault occurs. To return to regular operation, the device must be manually restarted.
201	LED Series	☐	\<series>	Displays the LED series name.

#	Status	State	Value	Description
		☐	Unknown	Cannot identify any LED modules.
		🟧	Mismatch	Detects more than one LED series in the system.
203	Ambient Brightness	☐	<value>	Displays the value in lux from the ambient light sensor or N/A when not connected.
		🟧	Multiple ambient light sensors found	Indicates more than one ambient light sensor is connected to the system.
		🟥	Error reading from ambient light sensor	Indicates an error reading from the ambient light sensor.
205	Calibration Data	☐	OK	All LED modules have calibration.
		☐	Mixed (v1.1/v1.2)	All LED modules have calibration data but multiple compatible versions have been found.
		🟧	Missing Calibration Data	Some LED modules do not have calibration data.
		🟧	Sensor Not Connected	Indicates no sensor is present.

Signal Group (SST+SIGN?)

The Signal group provides values and fault conditions relating to the video signal status for the wall controller.

#	Status	State	Value	Description
1 2 3 4 5 6 7 8 9	DP 1 DP 2 HDMI 1 HDMI 2 SDI 1 SDI 2 SDI 3 SDI 4 SDVOE	☐	<signal>	Displays the signal specific information for the signal.
		☐	Unavailable	The signal is not available.
		☐	No Signal	There is no signal.
52	3D Sync	☐	Valid 3D Sync	Indicates a valid external 3D sync signal.
		☐	Internal 3D Sync	Indicates 3D mode where no external sync is required.
		☐	N/A	Indicates no input signal or not a 3D mode.

#	Status	State	Value	Description
		🟧	Invalid 3D Sync	An external 3D sync signal exists but it is not correct.
		🟧	No 3D Sync	The 3D sync is missing.
54	Showing Redundant Input	⬜	No	The wall controller is not showing the redundant input.
		🟧	Yes	The wall controller is showing the redundant input.

Version Group (SST+VERS?)

The Version Group provides values and fault conditions related to software and hardware versions for the wall controller.

#	Status	State	Value	Description
0	Main Control Board SW Version	⬜	<version>	Displays the software version running on the main control board.
		🟧	Unknown	Cannot determine the software version information.
1	Main Control Board HW Version	⬜	<version>	Displays the hardware version for the main control board.
19	Keypad Display HW Version	⬜	<version>	Displays the hardware version for the keypad display.
		⬜	Unknown	Cannot retrieve the hardware version as the board is not ready.
65	Wall Controller Software Versions	⬜	<version>	Displays the software version for all the wall controllers.
		⬜	N/A	The software version for all the wall controllers is not available.
		🟧	Mismatch	A software version mismatch exists in the connected system wall controllers.
66	Octroller Software Versions	⬜	<version>	Displays the software version for all the Octrollers.
		⬜	N/A	The software version for all the Octrollers is not available.
		🟧	Mismatch	A software version mismatch exists in the connected system Octrollers.
67	Tiles Software Versions	⬜	<version>	Displays the software version for specified tiles.
		⬜	N/A	The software version for the specified tiles is not available.

#	Status	State	Value	Description
		🟧	Mismatch	A software version mismatch exists in the connected system.
70	System Level Versions	⬜	<version>	Displays the software version for all system components.
		⬜	N/A	The software version for the system level software is not available.
		🟧	Mismatch	A software version mismatch exists in the connected components (wall controllers and Octrollers).

Temperature Group (SST+TEMP?)

The Temperature Group provides values and fault conditions for temperature-related items for the wall controller.

#	Status	State	Value	Description
4	Main Control Board Temperature	⬜	OK	Indicates the temperature of the main control board is OK.
		⬜	Unknown	Cannot determine the temperature of the main control board.
		🟧	Warning	The temperature of the main control board has reached warning values.
		🟥	Critical Fault	The temperature of the main control board has encountered a critical fault.
129 130	QSFP+0 QSFP+1	⬜	<value>	Indicates the temperature of the installed QSFP+ module.
		⬜	Unknown	The installed module does not support temperature readings.
		⬜	N/A	No module is installed.
		🟧	Warning	The QSFP+ temperature has reached warning values (v1.3.4 or higher).
		🟥	Critical Fault	The QSFP+ temperature has encountered a critical fault (v1.3.4 or higher).

Cooling Group (SST+COOL?)

The Cooling Group provides values and fault conditions related to fans for the wall controller.

#	Status	State	Value	Description
0	Intake (Fan 3)	⬜	<tach> RPM	Displays the RPM of the intake fan.

#	Status	State	Value	Description
		☐	Unknown	Cannot determine the RPM of the intake fan.
		🟧	0 RPM	Indicates the fan speed is too low.
51	Main Control Board Blower	☐	\<tach\> RPM	Displays the RPM of the main control board blower.
		☐	Unknown	Cannot determine the RPM of the main control board blower.
		🟧	0 RPM	Indicates the blower speed is too low.

Serial Group (SST+SERI?)

The Serial Group provides values and fault conditions related to hardware serial numbers for the wall controller.

#	Status	State	Value	Description
0	Main Control Board S/N	☐	\<serial number\>	Displays the electronic serial number of the main control board.
		🟧	Missing Serial Number	Cannot retrieve the value because the serial number of the board is missing.

Octroller status system items

The following sections provide the status system items for the Octroller.

Octroller status items cannot be retrieved through the serial port or Ethernet port 3002. However, they can be viewed in the wall controller web user interface. Only the wall controller status system is accessible through the Christie serial protocol.

System Group (SST+SYST?)

The System group provides values and fault conditions relating to the system and its health for the Octroller.

#	Status	State	Value	Description
9	Built-In Self Test	☐	N/A	The built-in self test has not been executed yet.
		☐	PASS	The built-in self test completed successfully.
		🟧	FAILED	The built-in self-test did not complete successfully.
10	System ID Board	☐	OK	Properly detected and initialized the Octroller board.

#	Status	State	Value	Description
		🟥	Communication Fault	Cannot communicate with the Octroller board.
		🟥	Unknown	The information on the Octroller board is unknown.
30	Main Control Board	⬜	OK	The main control board has been initialized at least once and is known to be OK.
		🟥	Bad PoE Power Source Device (PSE)	The main control board has a bad PoE (Power over Ethernet) power source device.
		🟥	PoE Power Source Device Too Hot	The main control board PoE (Power over Ethernet) power source device is too hot
		🟥	Bad PoE Supply Voltage xV	The main control board PoE (Power over Ethernet) has a bad supply voltage.
		🟥	Initialization Fault	Cannot successfully initialize the main control board.
97	Port0	⬜	OK	The tile in port is OK.
98	Port1			
99	Port2	⬜	Not detected	The tile in port is not detected.
100	Port3			
101	Port4	🟧	Communication Fault	The tile in port encountered a communication fault.
102	Port5			
103	Port6			
104	Port7			
105	Port 0 Link Speed	⬜	Full Speed	The port is operating at full speed.
106	Port 1 Link Speed			
107	Port 2 Link Speed	⬜	Down	The port is down (the tile is not connected).
108	Port 3 Link Speed			
109	Port 4 Link Speed	🟧	Full Speed not reached; check connection	The port is working but not at full speed.
110	Port 5 Link Speed			
111	Port 6 Link Speed			
112	Port 7 Link Speed			
118	QSFP+0	⬜	OK	The QSFP connection for the port is present.
119	QSFP+1			
		⬜	Not Present	The QSFP connection for the port is not present.
		⬜	Link Down	The QSFP connection on the port has no device at the other end.

#	Status	State	Value	Description
		🟧	Device Error	The QSFP connection on the port ran into a device error with an active signal.
		🟧	Auto Disabled	The QSFP connection was disabled due to link/error toggle communication errors.
126	MOSFET on port 0	⬜	OK	The MOSFET is operating as expected.
127	MOSFET on port 1			
128	MOSFET on port 2	🟥	Error	The MOSFET has experienced an error.
129	MOSFET on port 3			
130	MOSFET on port 4			
131	MOSFET on port 5			
132	MOSFET on port 6			
133	MOSFET on port 7			
134	Port 0 current threshold	⬜	OK	The current threshold for the port is OK.
135	Port 1 current threshold			
136	Port 2 current threshold	🟥	Error	The current threshold for the port has been exceeded.
137	Port 3 current threshold			
138	Port 4 current threshold			
139	Port 5 current threshold			
140	Port 6 current threshold			
141	Port 7 current threshold			
143	Pixel Pitch	⬜	<value>mm-Pixel Pitch	The pixel pitch is OK and matches across the Octroller.
		⬜	Unknown	The pixel pitch information is unknown.
		🟧	Mismatch	The pixel pitch is mismatched in the system.
147	Port 0 Module 0	⬜	OK	The module has been detected with no errors.
148	Port 0 Module 1			
149	Port 0 Module 2	⬜	Not Detected	Cannot detect the module.
150	Port 1 Module 0			
151	Port 1 Module 1	🟧	Pixel Data Missing	The module is missing the pixel data.
152	Port 1 Module 2			
153	Port 2 Module 0	🟧	Colour Data Missing	The module is missing the color data.
154	Port 2 Module 1			
155	Port 2 Module 2	🟧	Pixel and Colour Data Missing	The module is missing the color and pixel data.
156	Port 3 Module 0			
157	Port 3 Module 1	🟧	Manufacturer Missing	The module is missing the manufacturer information.
158	Port 3 Module 2			
159	Port 4 Module 0			

#	Status	State	Value	Description
160	Port 4 Module 1	🟧	Type Missing	The module is missing the type information.
161	Port 4 Module 2			
162	Port 5 Module 0	🟧	Serial Missing	The module is missing its serial number.
163	Port 5 Module 1			
164	Port 5 Module 2			
165	Port 6 Module 0			
166	Port 6 Module 1			
167	Port 6 Module 2			
168	Port 7 Module 0			
169	Port 7 Module 1			
170	Port 7 Module 2			
171	Octroller Tile Count	☐	<number of Tiles connected>	Indicates the number of tiles connected to the Octroller.
		☐	Unknown	The number of tiles connected to the Octroller is unknown.
172	Octroller Module Count	☐	<number of LED modules connected>	Indicates the number of LED modules connected to the Octroller.
		☐	Unknown	The number of LED modules connected to the Octroller is unknown.
173	Octroller Supply Voltage	☐	<supply voltage>V	Indicates the Octrollers supply voltage in Volts.
		☐	N/A	The Octrollers supply voltage is currently not available.
174	Power Consumption	☐	<number consumption>W	Indicates the total Octroller power consumption in Watts.
		☐	N/A	The total power consumption is currently not available.
177	Port 0 Module 0 Run Time	☐	<number> mins	Indicates the run time in minutes.
178	Port 0 Module 1 Run Time			
179	Port 0 Module 2 Run Time	☐	N/A	The run time is not available.
180	Port 1 Module 0 Run Time			
181	Port 1 Module 1 Run Time			
182	Port 1 Module 2 Run Time			
183	Port 2 Module 0 Run Time			
184	Port 2 Module 1 Run Time			
185	Port 2 Module 2 Run Time			
186	Port 3 Module 0 Run Time			
187	Port 3 Module 1 Run Time			
188	Port 3 Module 2 Run Time			
189	Port 4 Module 0 Run Time			

#	Status	State	Value	Description
190	Port 4 Module 1 Run Time			
191	Port 4 Module 2 Run Time			
192	Port 5 Module 0 Run Time			
193	Port 5 Module 1 Run Time			
194	Port 5 Module 2 Run Time			
195	Port 6 Module 0 Run Time			
196	Port 6 Module 1 Run Time			
197	Port 6 Module 2 Run Time			
198	Port 7 Module 0 Run Time			
199	Port 7 Module 1 Run Time			
200	Port 7 Module 2 Run Time			
201	LED Series	☐	<series>	Indicates the LED series, where series = the LED series name S60(P3)/S40(NTSC).
		☐	Unknown	Did not identify any LED modules.
		🟧	Mismatch	More than one LED series are detected on the Octroller.
213	Custom Configuration Files	☐	OK	All module configuration files are not corrupted.
		🟧	Corrupted Files	At least one of the module configuration files is corrupted.

Signal Group (SST+SIGN?)

The Signal group provides values and fault conditions relating to the video signal status for the Octroller.

#	Status	State	Value	Description
54	Showing Secondary Wall Controller	☐	No	The Octroller is not displaying the video signal from the secondary wall controller.
		☐	N/A	The array detects only one wall controller.
		🟧	Yes	The Octroller is showing the video signal from the secondary wall controller.

Temperature Group (SST+TEMP?)

The Temperature Group provides values and fault conditions for temperature-related items in the Octroller.

#	Status	State	Value	Description
4	Main Control Board Temperature	☐	OK	Indicates the temperature of the main control board is OK.
		☐	Unknown	Cannot determine the temperature of the main control board.
		🟧	Warning	The temperature of the main control board has reached warning values.
		🟥	Critical Fault	The temperature of the main control board has encountered a critical fault.
82	Port 0 FPGA die Temperature	☐	OK	Indicates the temperature of the port FPGA is OK.
		☐	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
83 84 85	Port 0 LED Module 0 Temperature Port 0 LED Module 1 Temperature Port 0 LED Module 2 Temperature	☐	OK	Indicates the module temperature is OK.
		☐	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
86	Port 1 FPGA die Temperature	☐	OK	Indicates the temperature of the port FPGA is OK.
		☐	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
87 88 89	Port 1 LED Module 0 Temperature Port 1 LED Module 1 Temperature Port 1 LED Module 2 Temperature	☐	OK	Indicates the module temperature is OK.
		☐	Unknown	Cannot determine the temperature of the module.

#	Status	State	Value	Description
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
90	Port 2 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
91 92 93	Port 2 LED Module 0 Temperature Port 2 LED Module 1 Temperature Port 2 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
94	Port 3 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
95 96 97	Port 3 LED Module 0 Temperature Port 3 LED Module 1 Temperature Port 3 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
98	Port 4 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.

#	Status	State	Value	Description
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
99 100 101	Port 4 LED Module 0 Temperature Port 4 LED Module 1 Temperature Port 4 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
102	Port 5 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
103 104 105	Port 5 LED Module 0 Temperature Port 5 LED Module 1 Temperature Port 5 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
106	Port 6 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
107 108 109	Port 6 LED Module 0 Temperature Port 6 LED Module 1 Temperature Port 6 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.

#	Status	State	Value	Description
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
110	Port 7 FPGA die Temperature	⬜	OK	Indicates the temperature of the port FPGA is OK.
		⬜	Unknown	Cannot determine the temperature of the port FPGA.
		🟧	Warning	The temperature of the port FPGA has reached warning values.
		🟥	Critical Fault	The temperature of the port FPGA has encountered a critical fault.
111 112 113	Port 7 LED Module 0 Temperature Port 7 LED Module 1 Temperature Port 5 LED Module 2 Temperature	⬜	OK	Indicates the module temperature is OK.
		⬜	Unknown	Cannot determine the temperature of the module.
		🟧	Warning	The temperature of the module has reached warning values.
		🟥	Critical Fault	The temperature of the module has encountered a critical fault.
129 130	QSFP+0 Temperature QSFP+1 Temperature	⬜	<value>	Indicates the temperature of the installed QSFP module.
		⬜	Unknown	The installed QSFP+ module does not support temperature readings.
		⬜	N/A	Indicates no module is installed.
		🟧	Warning	The QSFP+ temperature has reached warning values for version 1.3.4 and higher.
		🟥	Critical Fault	The QSFP+ temperature has encountered a critical fault for version 1.3.4 and higher.

Version Group (SST+VERS?)

The Version Group provides values and fault conditions related to software and hardware versions for the Octroller.

#	Status	State	Value	Description
0	Main Control Board SW Version	⬜	<version>	Displays the software version running on the main control board.

#	Status	State	Value	Description
1	Main Control Board HW Version	☐	<version>	Displays the hardware version for the main control board.

Serial Group (SST+SERI?)

The Serial Group provides values and fault conditions related to hardware serial numbers for the Octroller.

#	Status	State	Value	Description
0	Main Control Board S/N	☐	<serial number>	Displays the electronic serial number of the main control board.
		🟧	Missing Serial Number	Cannot retrieve the value because the serial number of the board is missing.