

Parameter ID	Parameter ID HEX	Parameter Name	Parameter Description	Type	Min. Write Value	Max. Write Value	Value Description	Request	Response
128	80	SYNC Start	Start a run in SYNC mode	Func	-	-	Note: The internal, master and error counter are not changed or set to default values.	Standard	Standard
129	81	SYNC Stop	Stop a run in SYNC mode	Func	-	-	Note: The internal, master and error counter are not changed or set to default values.	Standard	Standard
130	82	SYNC Stop Condition	Set or read LSByte value of stop condition for SYNC mode run	R/W	0	65536	This parameter defines the number of cycles before automatic stop of a SYNC mode run. Set a zero in parameter ID 130 and ID 131 to disable automatic stop feature.	Standard	Standard
131	83	SYNC Stop Condition	Set or read MSByte value of stop condition for SYNC mode run	R/W	0	65536	This parameter defines the number of cycles before automatic stop of a SYNC mode run. Set a zero in parameter ID 130 and ID 131 to disable automatic stop feature.	Standard	Standard
132	84	SYNC Run Active	Read the SYNC run active information	R	-	-	0=No SYNC run active 1= SYNC run active	Standard	Standard
133	85	Ethernet Target IP Address 0-1	Set or read MSByte of ethernet target IP address	R/W	0	65536	Target IP address of SYNC data packages.	Standard	Standard
134	86	Ethernet Target IP Address 2-3	Set or read LSByte of ethernet target IP address	R/W	0	65536	Target IP address of SYNC data packages.	Standard	Standard
135	87	Ethernet Target Port	Set or read ethernet target port	R/W	0	65536	Target port of SYNC data packages.	Standard	Standard
136	88								
137	89								
138	8A	SYNC segment qty	SYNC segment quantity in each SYNC cycle. This parameter is part of the SYNC data package header only.	R	-	-	This parameter is sent as part of the header in UDP packages in SYNC Mode only. Reading out this parameter with standard request results in the reponse value 0.	Standard	Standard
139	8B	SYNC segment number	SYNC segment number in each SYNC cycle. This parameter is part of the SYNC data package header only.	R	-	-	This parameter is sent as part of the header in UDP packages in SYNC Mode only. Reading out this parameter with standard request results in the reponse value 0.	Standard	Standard
140	8C	SYNC Status Data Setting	Set or read configuration of trasmitted status data in each SYNC cycle	R/W	0	63	Defines the Status Data to be sent. Each Bit enables or disables a seperate status information: Bit 0: 0 = Disable "Channel Index"; 1=Enable "Channel Index" Bit 1: 0 = Disable Firmware Information; 1 = Enable Firmware Information: "Firmware Version Major", "Firmware Version Minor", "Firmware Version Patch", "Firmware Version Build", "Firmware Version Variant" Bit 2: 0 = Disable "SYNC Mode"; 1= Enable "SYNC Mode" Bit 3: 0 = Disable "SYNC Cycle Time"; 1= Enable "SYNC Cycle Time" Bit 4: 0 = Disable "MCU Status"; 1=Enable "MCU Status" Bit 5: 0 = Disable "Board Temperature"; 1=Enable "Board Temperature" Bit 6-15: Reserved	Standard	Standard
141	8D	SYNC Runtime Data Setting	Set or read configuration of trasmitted runtime data in each SYNC cycle	R/W	0	2047	Defines the Runtime Data to be sent. Each Bit enables or disables a seperate runtime information: Bit 0: 0 = Disable "SYNC Run Active"; 1=Enable "SYNC Run Active" Bit 1: 0 = Disable "Realtime"; 1=Enable "Realtime" Bit 2: 0 = Disable "Lifetime"; 1=Enable "Lifetime" Bit 3: 0 = Disable "Output Counts"; 1=Enable "Output Counts" Bit 4: 0 = Disable "Input Counts"; 1=Enable "Input Counts" Bit 5: 0 = Disable "Output Count Rate"; 1=Enable "Output Count Rate" Bit 6: 0 = Disable "Input Count Rate"; 1=Enable "Input Count Rate" Bit 7: 0 = Disable "Cycle Counter Internal"; 1=Enable "Cycle Counter Internal" Bit 8: 0 = Disable "Cycle Counter Master"; 1=Enable "Cycle Counter Master" Bit 9: 0 = Disable "SYNC Cycle Error Counter"; 1=Enable "Cycle Error Counter" Bit 10: 0 = Disable "SYNC Com Error"; 1=Enable "SYNC Com Error" Bit 11-15: Reserved	Standard	Standard
142	8E	SYNC Spectral Data Setting	Set or read configuration of transmitted spectral data in each SYNC cycle	R/W	0	1	Defines the spectral data to be sent: 0 = No spectral data 1 = Send MCA others: no spectral data	Standard	Standard
143	8F	SYNC Channel Index	Set or read the SYNC channel index	R/W	0	255	Channel index of the system for identification within a multichannel system	Standard	Standard
144	90	SYNC Mode	Set or read SYNC Mode	R/W	0	4	0 = No SYNC (Single channel operation) 1 = MX-Sort Master 2 = MX-Sort Slave 3 = MX-Sort Free-Running Slave 4 = Mapping Mode		
145	91	SYNC Cycle Time Low	Set or read LSByte of SYNC measument time for master or mapping mode	R/W	0	65535	LSBytes of time in units of 10µs	Standard	Standard
146	92	SYNC Cycle Time High	Set or read MSByte of SYNC measument time for master or mapping mode	R/W	0	65535	MSBytes of time in units of 10µs	Standard	Standard
147	93	SYNC Cycle Error Counter	Read SYNC Cycle Error Counter	R	0	65535	Error counter which is incremented if the master cycle counter value doesn't match with the internal cycle counter value of the channel in case of slave operation. In Mapping Mode the counter is incremented if a trigger was received during a busy periode.	Standard	Standard
148	94	SYNC Com Error	Read SYNC Com Error	R	-	-	Bitmask, each bit represents a different synchronisation error type. Bit 0: wrong UART start or stopbit; 0 = no error; 1 = error Bit 1: wrong UART parity bit; 0 = no error; 1 = error Bit 2-15: reserved	Standard	Standard
149	95	SYNC Cycle Counter Internal	Read internal SYNC cycle counter	R	-	-	Counter of the current cycle of this channel. In slave mode, this value will be synchronised by the master, if a master is present in the system.	Standard	Standard
150	96	SYNC Cycle Counter Master	Read master SYNC cycle counter	R	-	-	This value is sent from the SYNC master to all slaves. The internal counters of the slaves will be synchronised by the master.	Standard	Standard
151	97	SYNC Reset	Initiate reset of internal, master and error counter to default values	Func	-	-	Resets the internal, master and error counter to default values.	Standard	Standard
152	98	SYNC Autostart	Set or read utilization of autostart feature	R/W	0	1	Defines the start-up behaviour on power-up: 0 = SYNC measurement is not automatically started after power-up 1 = SYNC measurement is automatically started after power-up	Standard	Standard
153	99	SYNC Test Pattern	Set or read utilization of MCA test pattern	R/W	0	1	0 = Disable test pattern, 1 = Enable test pattern	Standard	Standard