

AX-SIGFOX

This sends a Sigfox frame containing { 0xAA : 0xBB : 0x12 : 0x34 } without waiting for a response telegram.

AT\$CB=0xAA,1

OK

The 'CB' command sends out a continuous pattern of bits, in this case 0xAA = 0b10101010.

AT\$P=1

OK

This transitions the device into sleep mode. Out-of-band transmissions will still be triggered. The UART is powered down. The device can be woken up by a low level on the UART signal, i.e. by sending break.

Table 10. COMMANDS

Command	Name	Description												
AT	Dummy Command	Just returns 'OK' and does nothing else. Can be used to check communication.												
AT\$SB=bit[,bit]	Send Bit	Send a bit status (0 or 1). Optional bit flag indicates if AX-Sigfox should receive a downlink frame.												
AT\$SF=frame[,bit]	Send Frame	Send payload data, 1 to 12 bytes. Optional bit flag indicates if AX-Sigfox should receive a downlink frame.												
AT\$SO	Manually send out of band message	Send the out-of-band message.												
AT\$uint?	Get Register	Query a specific configuration register's value. See chapter "Registers" for a list of registers.												
AT\$uint=uint	Set Register	Change a configuration register.												
AT\$IF=uint	Set TX Frequency	Set the output carrier macro channel for Sigfox frames.												
AT\$IF?	Get TX Frequency	Get the currently chosen TX frequency.												
AT\$DR=uint	Set RX Frequency	Set the reception carrier macro channel for Sigfox frames.												
AT\$DR?	Get RX Frequency	Get the currently chosen RX frequency.												
AT\$CW=uint,bit[,uint_opt]	Continuous Wave	<p>To run emission tests for Sigfox certification it is necessary to send a continuous wave, i.e. just the base frequency without any modulation. Parameters:</p> <table> <tr> <th>Name</th><th>Range</th><th>Description</th></tr> <tr> <td>Frequency</td><td>800000000–999999999, 0</td><td>Continuous wave frequency in Hz. Use 868130000 for Sigfox or 0 to keep previous frequency.</td></tr> <tr> <td>Mode</td><td>0, 1</td><td>Enable or disable carrier wave.</td></tr> <tr> <td>Power</td><td>0–14</td><td>dBm of signal Default: 14</td></tr> </table>	Name	Range	Description	Frequency	800000000–999999999, 0	Continuous wave frequency in Hz. Use 868130000 for Sigfox or 0 to keep previous frequency.	Mode	0, 1	Enable or disable carrier wave.	Power	0–14	dBm of signal Default: 14
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AT\$CB=uint_opt,bit	Test Mode: TX constant byte	<p>For emission testing it is useful to send a specific bit pattern. The first parameter specifies the byte to send. Use '–1' for a (pseudo-)random pattern. Parameters:</p> <table> <tr> <th>Name</th><th>Range</th><th>Description</th></tr> <tr> <td>Pattern</td><td>0–255, –1</td><td>Byte to send. Use '–1' for a (pseudo-)random pattern.</td></tr> <tr> <td>Mode</td><td>0, 1</td><td>Enable or disable pattern test mode.</td></tr> </table>	Name	Range	Description	Pattern	0–255, –1	Byte to send. Use '–1' for a (pseudo-)random pattern.	Mode	0, 1	Enable or disable pattern test mode.			
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Mode	0, 1	Enable or disable pattern test mode.												
AT\$T?	Get Temperature	Measure internal temperature and return it in 1/10 th of a degree Celsius.												
AT\$V?	Get Voltages	Return current voltage and voltage measured during the last transmission in mV.												