

# GEOGRAM ONE EEPROM MAP

Address	Contents	Range	Description	Default	T.C.
0	Pin Code	4 digit alphanumeric	Four digit alpha numeric pin code.	0000	.
5	SMS Number	up to 15 digits numeric	Default SMS number that reply messages get sent to by tracking device.	NULL	*
21	Return Address Configuration	1 digit numeric	0 - Reply back to SMS address of incoming message. 1 - Send message to SMS address stored in EEPROM.	0	.
22	Time Zone	-12 to +14	Timezone correction setting based off UTC. (ie EST = -4)	-4	.
23	Standard or Metric	1 digit numeric	0 - English units (MPH, feet, etc...) 1 - Metric units (KPH, meters, etc...).	0	.
24	Battery Low Alert	32 - 99	Percentage level at or below which a "Low Battery Alert" message is sent to the SMS address stored in EEPROM.	32	.
25	IO STATE D4	0 - 2, 4	<b>Pin Configuration Settings for Digital Pin D4.</b> 0 - Digital Out, Active Low. 1 - Digital Out, Active High. 2 - Digital Input, Pullups enabled. 4 - Digital Input Interrupt. If pin is switched to GND, message stored in EEPROM is sent to SMS address stored in EEPROM. <b>Polling commands for D4. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the digital pin when configured as a Digital Input. 6 - Single Pulse H -> L -> H (Output High config only) 7 - Double Pulse H -> L -> H -> L -> H (Output High config only)	2	.
26	IO STATE D10	0 - 2, 4	<b>Pin Configuration Settings for Digital Pin D10.</b> 0 - Digital Out, Active Low. 1 - Digital Out, Active High. 2 - Digital Input, Pullups enabled. 4 - Digital Input Interrupt. If pin is switched to GND, message stored in EEPROM is sent to SMS address stored in EEPROM. <b>Polling commands for D10. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the digital pin when configured as a Digital Input. 6 - Single Pulse H -> L -> H (Output High config only) 7 - Double Pulse H -> L -> H -> L -> H (Output High config only)	4	.

27	IO STATE A1	0 - 3	<p><b>Pin Configuration Settings for Digital Pin A1.</b></p> <p>0 - Digital Out, Active Low. 1 - Digital Out, Active High. 2 - Digital Input, Pullups enabled. 3 - Analog Input (Analog range is 0 - 3.3 volts DC). <b>Polling commands for A1. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the analog pin when configured as a Analog Input (0 - 1023 wrt to 0 - 3.3 vdc). 5 - Read the digital pin when configured as a Digital Input. 6 - Single Pulse H -&gt; L -&gt; H (Output High config only) 7 - Double Pulse H -&gt; L -&gt; H -&gt; L -&gt; H (Output High config only)</p>	2	.
28	IO STATE A2	0 - 3	<p><b>Pin Configuration Settings for Digital Pin A2.</b></p> <p>0 - Digital Out, Active Low. 1 - Digital Out, Active High. 2 - Digital Input, Pullups enabled. 3 - Analog Input (Analog range is 0 - 3.3 volts DC). <b>Polling commands for A2. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the analog pin when configured as a Analog Input (0 - 1023 wrt to 0 - 3.3 vdc). 5 - Read the digital pin when configured as a Digital Input. 6 - Single Pulse H -&gt; L -&gt; H (Output High config only) 7 - Double Pulse H -&gt; L -&gt; H -&gt; L -&gt; H (Output High config only)</p>	2	.
29	IO STATE A3	0 - 3	<p><b>Pin Configuration Settings for Digital Pin A3.</b></p> <p>0 - Digital Out, Active Low. 1 - Digital Out, Active High. 2 - Digital Input, Pullups enabled. 3 - Analog Input (Analog range is 0 - 3.3 volts DC). <b>Polling commands for A3. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the analog pin when configured as a Analog Input (0 - 1023 wrt to 0 - 3.3 vdc). 5 - Read the digital pin when configured as a Digital Input. 6 - Single Pulse H -&gt; L -&gt; H (Output High config only) 7 - Double Pulse H -&gt; L -&gt; H -&gt; L -&gt; H (Output High config only)</p>	2	.
30	IO STATE A6	3 only	<p><b>Pin Configuration Settings for Digital/Analog Pin A6.</b></p> <p>3 - Analog Input (Analog range is 0 - 3.3 volts DC). (ONLY SETTING ALLOWED) <b>Polling commands for A3. Writing the the below number to the address will execute the corresponding commands.</b> 5 - Read the analog pin when configured as a Analog Input (0 - 1023 wrt to 0 - 3.3 vdc).</p>	3	.

31	IO Sing. Pulse Time	1 - 255	Digital pin configured as Output High can be pulsed Low (H->L->H). Low period is specified by value x10 mseconds. Example: max value of 255 equals a low pulse of 2.55 seconds.	255	.
32	IO Dbl Pulse Time1	1 - 255	Digital pin configured as Output High can be double pulsed (H->L->H->L->H). First Low period is specified by value x10 mseconds. Example: value of 128 equals a low pulse of 1.28 seconds.	255	.
33	IO Dbl Pulse Time2	1 - 255	Digital pin configured as Output High can be double pulsed (H->L->H->L->H). Second High period is specified by value x10 mseconds. Example: value of 50 equals a high pulse of 0.5 seconds.	255	.
34	IO Dbl Pulse Time3	1 - 255	Digital pin configured as Output High can be double pulsed (H->L->H->L->H). Second Low period is specified by value x10 mseconds. Example: value of 5 equals a low pulse of 50 milliseconds.	255	.
35	Sleep Configuration	0 - 15 (BWV)	Configuration settings to determine which subsystems get turned off during sleep mode and which overrides are in place to wake up device. Bit 0 - Turn GSM off when set to 1. Bit 1 - Turn GPS off when set to 1. Bit 2 - Override sleep when plugged into charger when set to 1. Bit 3 - Override sleep when motion is detected when set to a 1. Example 1: Set value = 15 (1111), Both GSM and GPS are turned off when sleeping. Device will not go to sleep if plugged into the charger or if motion is detected. Example 2: Set value = 10 (1010), Only GPS is turned off when sleeping. Device will not go to sleep if motion is detected.	3	.
36	Sleep: Time On	0 - 4,294,967,296 seconds	Time, in seconds, the device will stay awake. If set to 0, the sleep function is disabled.	0	.
40	Sleep: Time Off	0 - 4,294,967,296 seconds	Time, in seconds, the device will sleep. If set to 0, the sleep function is disabled.	0	.
44	Speed Limit	0 - 65536 mph/kph	If speed exceeds setting a message will be sent to the SMS address stored in EEPROM. When device speed falls below setting, minus Hysteresis, a second message is sent indicating maximum speed achieved during time.	0	.
46	Speed Limit Reset Hysteresis	0 - 255	Offset below Speed Limit the device must achieve before sending maximum speed message. Example: If hysteresis is set to 0 and speed limit is set to 65, going just above 65 will send the first message and falling just below 65 will send the second message. If Hysteresis is set to 5, then exceeding 65 will send the first message but the second message will not be sent until the speed falls below 60 (speed limit - hysteresis).	3	.
47	Geofence 1 Radius	+/- 2,147,483,648	The radius around the stored longitude/latitude settings in EEPROM used to define the fence area. A positive radius value activates an inside fence (ie if you leave the defined area) while a negative value activates an outside fence (ie if you enter the defined area). A value of zero deactivates fence monitoring. Preceding the value with an asterisk (*) will save the current longitude and latitude settings in EEPROM. Value is in meters or feet depending on Standard or Metric setting.	0	.

51	Geofence 1 Latitude	See Description	Latitude is typically formatted as ddm.ddd with South being negative. EEPROM format to store is the same without the use of the decimal point. Example: South latitude of 2701.3904 would be stored in EEPROM as -27013904. Example: North latitude of 5832.3356 would be stored as 58323356.	0	.
55	Geofence 1 Longitude	See Description	Longitude is typically formatted as dddmm.mmmm with West being negative. EEPROM format to store is the same without the use of the decimal point. Example: West longitude of 12701.3904 would be stored in EEPROM as -127013904. Example: East longitude of 15832.3356 would be stored as 158323356.	0	.
59	Geofence 2 Radius	+/- 2,147,483,648	See Geofence 1 description	0	.
63	Geofence 2 Latitude	See Description	See Geofence 1 description	0	.
67	Geofence 2 Longitude	See Description	See Geofence 1 description	0	.
71	Geofence 3 Radius	+/- 2,147,483,648	See Geofence 1 description	0	.
75	Geofence 3 Latitude	See Description	See Geofence 1 description	0	.
79	Geofence 3 Longitude	See Description	See Geofence 1 description	0	.
83	GF Breach Speed	0 - 255	Device speed can be included in Geofence breach calculation. Sometimes GPS signals wander and report false signals. By including speed into the calculation you can reduce false breaches. Example: Setting is 3 (mph). The device would have to moving faster than 2 mph before it would detect a breach of the Geofence.	3	.
84	GP Breach Repetitions	0 - 255	The number of Geofence breach repetitions can be included in the calculation. Sometimes GPS signals wander and report false signals. By including consecutive breach repetitions into the calculation you can reduce false breaches. Each repetition would be consecutive based off the location update frequency which is once per second. Example: Setting is 10 (seconds). The device would need to have breached the fence area for 10 consecutive seconds before it would activate the alarm.	10	.
85	BMA - 0x0F	0 - 255	See BMA250 datasheet for detailed explanation of register	5	.
86	BMA - 0x10	0 - 255	See BMA250 datasheet for detailed explanation of register	8	.
87	BMA - 0x11	0 - 255	See BMA250 datasheet for detailed explanation of register	0	.
88	BMA - 0x16	0 - 255	See BMA250 datasheet for detailed explanation of register	7	.
89	BMA - 0x17	0 - 255	See BMA250 datasheet for detailed explanation of register	0	.
90	BMA - 0x19	0 - 255	See BMA250 datasheet for detailed explanation of register	4	.
91	BMA - 0x1A	0 - 255	See BMA250 datasheet for detailed explanation of register	0	.
92	BMA - 0x1B	0 - 255	See BMA250 datasheet for detailed explanation of register	0	.
93	BMA - 0x20	0 - 255	See BMA250 datasheet for detailed explanation of register	6	.
94	BMA - 0x21	0 - 255	See BMA250 datasheet for detailed explanation of register	0x8E (HEX)	.
95	BMA - 0x25	0 - 255	See BMA250 datasheet for detailed explanation of register	0x0F (HEX)	.
96	BMA - 0x26	0 - 255	See BMA250 datasheet for detailed explanation of register	0xC0 (HEX)	.
97	BMA - 0x27	0 - 255	See BMA250 datasheet for detailed explanation of register	5	.
98	BMA - 0x28	0 - 255	See BMA250 datasheet for detailed explanation of register	4	.

99	UDP Send Interval on Battery	0 - 4,294,967,296	Time interval in seconds that position information is sent using UDP to the server while running off just the battery. Setting to 0 disables the feature.	0	.
103	UDP Send Interval on Charger	0 - 4,294,967,296	Time interval in seconds that position information is sent using UDP to the server while the device is plugged into the charger. Setting to 0 disables the feature.	0	.
107	UDP Power Profile	0 - 255 (BWV)	<p>Override settings for UDP send interval based off motion and/or speed conditions.</p> <p>Bit 0 - When set to a 1 only send UDP if motion is sensed while plugged into the charger.</p> <p>Bit 1 - When set to a 1 only send UDP if speed is exceeded while plugged into the charger.</p> <p>Bit 4 - When set to a 1 only send UDP if motion is sensed while running off the battery.</p> <p>Bit 5 - When set to a 1 only send UDP if speed is exceeded while running off the battery.</p> <p>Example 1: Set value = 0 (00000000), No overrides used, device will send UDP at preprogrammed interval on battery or charger.</p> <p>Example 2: Set value = 51 (00110011), UDP data will only be sent at the UDP interval if motion is detected or the speed limit is exceeded on both battery and charger.</p> <p>Example 3: Set value = 32 (00100000), While plugged in the charger no overrides are enabled and UDP data will be sent at interval. While on battery, UDP data will only be sent when speed limit is exceeded.</p>	0	.
108	UDP Speed on Battery	0 - 255	Speed limit to enable UDP send interval when active running off battery.	0	.
109	UDP Speed on Charger	0 - 255	Speed limit to enable UDP send interval when active while plugged in to charger.	0	.
110	SMS Send Interval on Battery	0 - 4,294,967,296	Time interval in seconds that position information is sent using SMS to the number saved in EEPROM while running off just the battery. Setting to 0 disables the feature.	0	.
114	SMS Send Interval on Charger	0 - 4,294,967,296	Time interval in seconds that position information is sent using SMS to the number saved in EEPROM while the device is plugged into the charger. Setting to 0 disables the feature.	0	.

118	SMS Power Profile	0 - 255 (BWV)	Override settings for SMS send interval based off motin and/or speed conditions. Bit 0 - When set to a 1 only send SMS if motion is sensed while plugged into the charger. Bit 1 - When set to a 1 only send SMS if speed is exceeded while plugged into the charger. Bit 4 - When set to a 1 only send SMS if motion is sensed while running off the battery. Bit 5 - When set to a 1 only send SMS if speed is exceeded while running off the battery. Example 1: Set value = 0 (00000000), No overrides used, device will send SMS at preprogrammed interval on battery or charger. Example 2: Set value = 51 (00110011), SMS data will only be sent at the SMS interval if motion is detected or the speed limit is exceeded on both battery and charger. Example 3: Set value = 32 (00100000), While plugged in the charger no overrides are enabled and SMS data will be sent at interval. While on battery, SMS data will only be sent when speed limit is exceeded.	0	.
119	SMS Speed on Battery	0 - 255	Speed limit to enable SMS send interval when active running off battery.	0	.
120	SMS Speed on Charger	0 - 255	Speed limit to enable SMS send interval when active while plugged in to charger.	0	.
121	Motion Message	15 digit ascii	Motion Detected message that is sent.	Motion Detected	*
137	Low Battery Message	15 digit ascii	Low Battery message that is sent	Low Battery	*
153	Geofence 1 Message	15 digit ascii	Geofence 1 breach message that is sent	Fence 1 Breach	*
169	Geofence 2 Message	15 digit ascii	Geofence 2 breach message that is sent	Fence 2 Breach	*
185	Geofence 3 Message	15 digit ascii	Geofence 3 breach message that is sent	Fence 3 Breach	*
201	Speed Limit Message	15 digit ascii	Speed limit exceed message that is sent	Speed Exceeded	*
217	Max Speed Limit Message	15 digit ascii	Maximum Speed limit message that is sent	Max Speed =	*
233	Geogram ONE ID	15 digit ascii	Geogram ONE user ID	GO FW_3.0b	*
249	Pin D4 Message	15 digit ascii	Pin D4 Interrupt message that is sent	Pin D4 Alert	*
265	Pin D10 Message	15 digit ascii	Pin D10 Interrupt message that is sent	Pin D10 Alert	*
281	Hyperlink 1	35 digit ascii	Google Maps link	<a href="http://maps.google.com/maps?q=">http://maps.google.com/maps?q=</a>	*
317	IMEI	15 digit ascii	IMEI data stored here	*	*
333	UDP APN	35 digit ascii	APN used for UDP	wholesale	*
369	UDP Host	35 digit ascii	Host used for UDP	193.193.165.166	*
405	UDP Port	0 - 65536	Port used for UDP	20332	.
407	UDP Header	15 digit ascii	Header used for UDP	#SD#	*
423 - 1023 UNUSED					