## List of commands (public functions) of the INA226\_WE library

Function	Parameters	what it does
void Init( )	none	initiates the INA226 with some default register values
void reset_INA226( )	none	reset of the device
void setCorrectionFactor( factor )	factor (float)  AVERAGE X	if INA226 current values differ from currents measured with calibrated equipment, you can apply a factor
void setAverage( mode )	X = 1, 4, 16, 64, 128, 256, 512, 1024 CONV TIME X	sets the number of samples that are averaged for one measurement
void setConversionTime( time )	X = 140, 204, 332, 588, 1100, 2116, 4156, 8244	sets time for conversion for shunt and bus voltage in microseconds
void setMeasureMode( mode )	CONTINUOUS, TRIGGERED, POWER_DOWN	sets the mode; for POWER_DOWN please use the powerDown function since it remembers the mode before power-down
void setCurrentRange( range )	MA_800, MA_400	sets the current range in mA
float getShuntVoltage_mV( )	none	delivers shunt voltage in mV
float getBusVoltage( )	none	delivers bus voltage in V
float getCurrent_mV( )	none	delivers current in mV
float getBusPower_mW( )	none	delivers the power in mW
void startSingleMeasurement()	none	starts single shot measurement and waits until data is available
void powerDown( )	none	switches the module off and saves the configuration before
void powerUp( )	none	switches the module on after Power Down and writes back the configuration (modes, gains, etc)
<pre>void waitUntilConversionCompleted()</pre>	none	waits until the current conversions and calculations are completed.
void setAlertPinActiveHigh()	none	by default the the alert pin is active-low; this function changes this
void enableAlertLatch( )	none	the alert flag is set and the alert pin is active, when the limit in the alert register is exceeded; by default it will be deleted with the next measurement in limit; with enableAlertLatch the flag will have to be cleared manually, which gives better control
void setAlertType( type, limit )	types: SHUNT_UNDER, SHUNT_OVER, BUS_UNDER, BUS_OVER, CURRENT_UNDER, CURRENT_OVER, POWER_OVER	sets the alert type and the limit:  SHUNT_OVER/_UNDER: limit in mV  BUS_OVER / _UNDER: limit in V  CURRENT_OVER / _UNDER: limit in mA  POWER_OVER: limit in mW
void readAndClearFlags( )	none	reads the Mask/Enable register; this clears the overflow, conversion ready and limit alert flags; the status of the flags are saved in the following bool variables: - overflow - convAlert - limitAlert