ADC

Macros

#define **DEFAULT_SAMPLE_RATE** (500)

Default ADC sample rate, in ms.

Functions

uint32_t **getADCSampleRate** ()

void **setADCSampleRate** (uint32_t sampleRate)

void **taskADCsample** (uint32_t ADC_base, uint32_t Sample_Sequencer, uint32_t *ADC_queue)

Detailed Description

ADCman.c - Communications module.

ADCtask.c - ADC module.

Function Documentation

uint32_t getADCSampleRate ( )

uint32_t **getADCSampleRate()**

This method is used to report the current sample rate of the ADC, in ms.

Returns

The current sample rate of the ADC, in ms.

void setADCSampleRate (uint32_t sampleRate)

void **setADCSampleRate()**

This method is used to set the sample rate of the ADC.

Parameters

sampleRate is the new sample rate of the ADC, in ms.

Returns

None.

void taskADCsample (uint32_t ADC_base,
uint32_t Sample_Sequencer,
uint32_t * ADC_queue
)

void taskADCsample(uint32_t ADC_base, uint32_t Sample_Sequencer, uint32_t *ADC_queue)

Parameters

ADC_base	is the base address of the ADC module.
Sample_Sequencer	is the sample sequence number.
ADC_queue	is the buffer where the ADC conversion data is stored.

This task triggers an ADC conversion and copies data from the specified sample sequencer output FIFO to *ADC_queue* upon completion of the conversion. *ADC_queue* must be set up to accomodate all conversion values in ADC FIFO.