Adaptive Threshold Based Sampling

ASIC: Ideal Single-Ended Adaptive Floating-Window Event-Based ADC

Type	Func	Description
Button	reset	reset
AWG / Button	trigger_start_sampling	manual sampling trigger (optional, instead of AWG trigger)
Switch	trigger_start_mode	'1' Start sampling on trigger - '0' Start sampling directly
Switch	adaptive_mode	'1' ATBS - '0' TBS
Switch	control_mode	'1' UART - '0' Switches
Switch	signal_select_in	'1' BNC - '0' ECG
Switch	enable	'1' Enable - '0' Disable
Switch	select_tbs_delta_steps	'1' "virtual" DAC resolution - '0' full DAC resolution
UART	trigger_start_mode	'1' Start sampling on trigger - '0' Start sampling directly
UART	adaptive_mode	'3' ATBS - '2' TBS
UART	signal_select_in	'5' BNC - '4' ECG
UART	enable	'7' Enable - '6' Disable
UART	select_tbs_delta_steps	'9' "virtual" DAC resolution - '8' full DAC resolution
UART	update config.	'U'
UART	start sampling	'S' (enter 2x)
UART	reset	'R'
UART	analog trigger settings	'T' and 'a' to 'f'
UART	SC NOC generator settings	'C' and 'a' to 'c'
UART	UART baudrate	'B' and 'a' to 'd'
UART	TBS virtual delta steps	'V' and 'a' to 'e'
UART	ATBS win_length / time_win	'W' and 'a' to 'f'

Type	Func	Description
UART	ATBS deltasteps_max	'D' and 'a' to 'e'
LED	idle	'1'... Lights up, if Main FSM is in idle state!
LED	overflow	'1'... Lights up, if FIFO is full!
LED	underflow	'1'... Lights up, if FIFO is empty!