

8.18.11 Registers

Instances

Instance	Domain	Base address	TrustZone			Split access	Description
			Map	Att	DMA		
SAADC : S	GLOBAL	0x500D5000	US	S	SA	No	Successive approximation analog-to-digital converter SAADC
SAADC : NS		0x400D5000					

Configuration

Instance	Domain	Configuration
SAADC : S	GLOBAL	CURRENTAMOUNT register not included.
SAADC : NS		

Register overview

Register	Offset	TZ	Description
TASKS_START	0x000		Start the ADC and prepare the result buffer in RAM
TASKS_SAMPLE	0x004		Take one ADC sample, if scan is enabled all channels are sampled. This task requires that SAADC has started, i.e. EVENTS_STARTED was set and EVENTS_STOPPED was not.
TASKS_STOP	0x008		Stop the ADC and terminate any on-going conversion
TASKS_CALIBRATEOFFSET	0x00C		Starts offset auto-calibration
SUBSCRIBE_START	0x080		Subscribe configuration for task START
SUBSCRIBE_SAMPLE	0x084		Subscribe configuration for task SAMPLE
SUBSCRIBE_STOP	0x088		Subscribe configuration for task STOP
SUBSCRIBE_CALIBRATEOFFSET	0x08C		Subscribe configuration for task CALIBRATEOFFSET
EVENTS_STARTED	0x100		The ADC DMA has started
EVENTS_END	0x104		The ADC has filled up the Result buffer
EVENTS_DONE	0x108		A conversion task has been completed. Depending on the mode, multiple conversions might be needed for a result to be transferred to RAM.
EVENTS_RESULTDONE	0x10C		A result is ready to get transferred to RAM.
EVENTS_CALIBRATEDONE	0x110		Calibration is complete
EVENTS_STOPPED	0x114		The ADC DMA has stopped
EVENTS_CH[n].LIMITH	0x118		Last results is above CH[n].LIMIT.HIGH
EVENTS_CH[n].LIMITL	0x11C		Last results is below CH[n].LIMIT.LOW
PUBLISH_STARTED	0x180		Publish configuration for event STARTED
PUBLISH_END	0x184		Publish configuration for event END
PUBLISH_DONE	0x188		Publish configuration for event DONE
PUBLISH_RESULTDONE	0x18C		Publish configuration for event RESULTDONE
PUBLISH_CALIBRATEDONE	0x190		Publish configuration for event CALIBRATEDONE
PUBLISH_STOPPED	0x194		Publish configuration for event STOPPED
PUBLISH_CH[n].LIMITH	0x198		Publish configuration for event CH[n].LIMITH
PUBLISH_CH[n].LIMITL	0x19C		Publish configuration for event CH[n].LIMITL
SHORTS	0x200		Shortcuts between local events and tasks
INTEN	0x300		Enable or disable interrupt
INTENSET	0x304		Enable interrupt
INTENCLR	0x308		Disable interrupt
STATUS	0x400		Status
TRIM.LINCALCOEFF[n]	0x440		Linearity calibration coefficient
ENABLE	0x500		Enable or disable ADC