8.18.11.37.4 RESULT.CURRENTAMOUNT

Address offset: 0x638

Number of buffer bytes transferred since last START, continuously updated

Bit number	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
ID																		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Reset 0x00000000	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

ID	R/W	Field	Value ID	Value	Description
A	R	AMOUNT			Number of buffer bytes transferred since last START, continuously updated.

8.18.11.38 NOISESHAPE

Address offset: 0x654

SAADC provides two operational noise shaping modes (one that prioritizes higher bandwith, while the other prioritizes higher accuracy) that allow trade-offs between ADC resolution, power consumption, and signal bandwidth.

Note: When using noise shaping, the first RESULTREADY event will take longer to arrive as the filters need to be filled with valid data.

Bit number	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
ID																															A	A
Reset 0x00000000	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

ID	R/W	Field	Value ID	Value	Description
A	RW	NOISESHAPE			Noise shaping configuration
			Disable	0	Disable noiseshaping. Configurable oversampling.
			NS1	1	Noiseshaping and decimating. Larger passband. Decimation ratio 8, 125 kS/s, with resulting bandwidth around 45 kHz. Takes precedence over the OVERSAMPLING register.
			NS2	2	Noiseshaping and decimating. Smaller passband. Decimation ratio 32, 31.25 kS/s, with resulting bandwidth around 7 kHz. Takes precedence over the OVERSAMPLING register.
			Audio	1	Use enumerator NS1 for future compatibility. This enumerator is deprecated.
			Accuracy	2	Use enumerator NS2 for future compatibility. This enumerator is deprecated.

8.19 SPIM — Serial peripheral interface controller with EasyDMA

The SPI controller peripheral (SPIM) with EasyDMA provides a full duplex, 4-wire synchronous serial communication interface.

The main features of SPIM are the following:

- EasyDMA direct transfer to and from RAM
- SPI mode [0..3]
- Individual selection of I/O pins
- Optional D/CX output line for distinguishing between command and data bytes