Processing in Output Input 32-bit CH1_{AVG} - Average value of Digital Filter Block DMA n CH2 samples $CH1_{AVG}$ $CH1_{AVG} = \frac{1}{n} \sum_{i=1}^{n} CH1(i)$ Channel 1 Channel 2 Channel 3 f = 10kHz 24-bit 24-bit 24-bit 32-bit $CH2_{AVG} = \frac{1}{n} \sum_{i=1}^{n} CH2(i)$ $\mbox{CH2}_{\mbox{\scriptsize AVG}}$ - Average value of CH1(i) CH2(i) CH3(i) n CH2 samples $CH2_{\text{AVG}}$ $CH3_{AVG} = \frac{1}{n} \sum_{i=1}^{n} CH3(i)$ 72-bit 32-bit CH3_{AVG} - Average value of n CH3 samples CH3_{AVG}