



**MMS – MCD
Application Team**

STM8L Training Slides

Routing interface (RI)

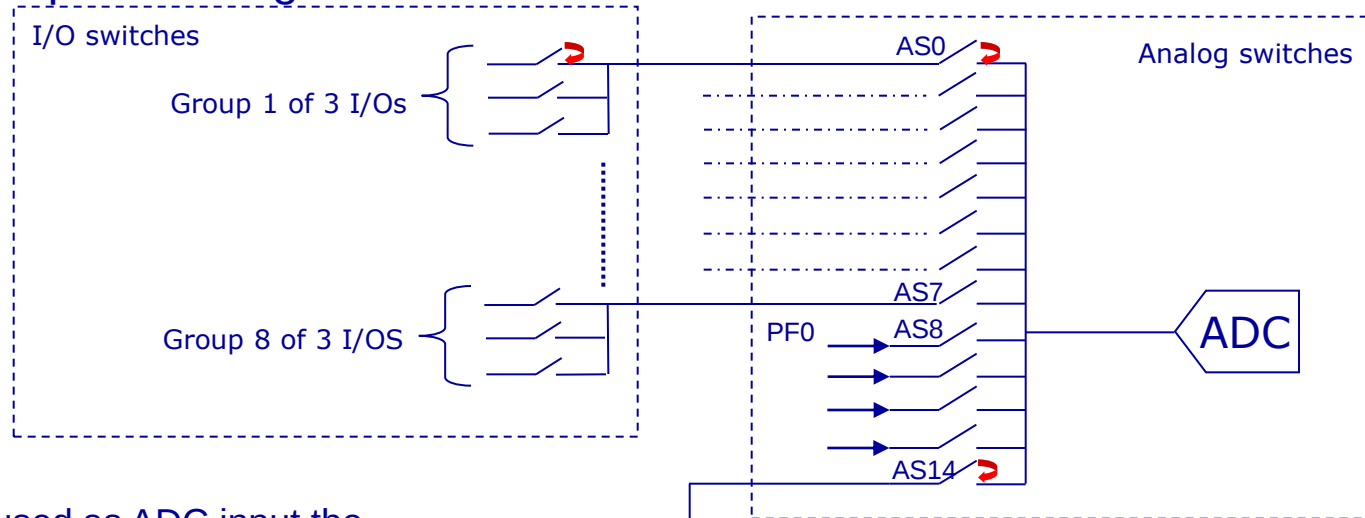
Routing Interface (RI) definition:

- configurable routing of I/O signals to TIM1, COMP1, COMP2, DAC, and Internal voltage reference
 - Controlled by the application software through RI registers
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- 24 programmable I/O switches for signal routing
 - 10 programmable analog switches for signal routing
 - COMP1 and COMP2 input and output routing
 - TIM1 input capture 2 and input capture 3 routing selection from 21 selectable I/Os.
 - DAC output routing to selectable I/Os for 28 and 32-pin packages.
 - Internal voltage reference (V_{REFint}) routing to selectable I/Os

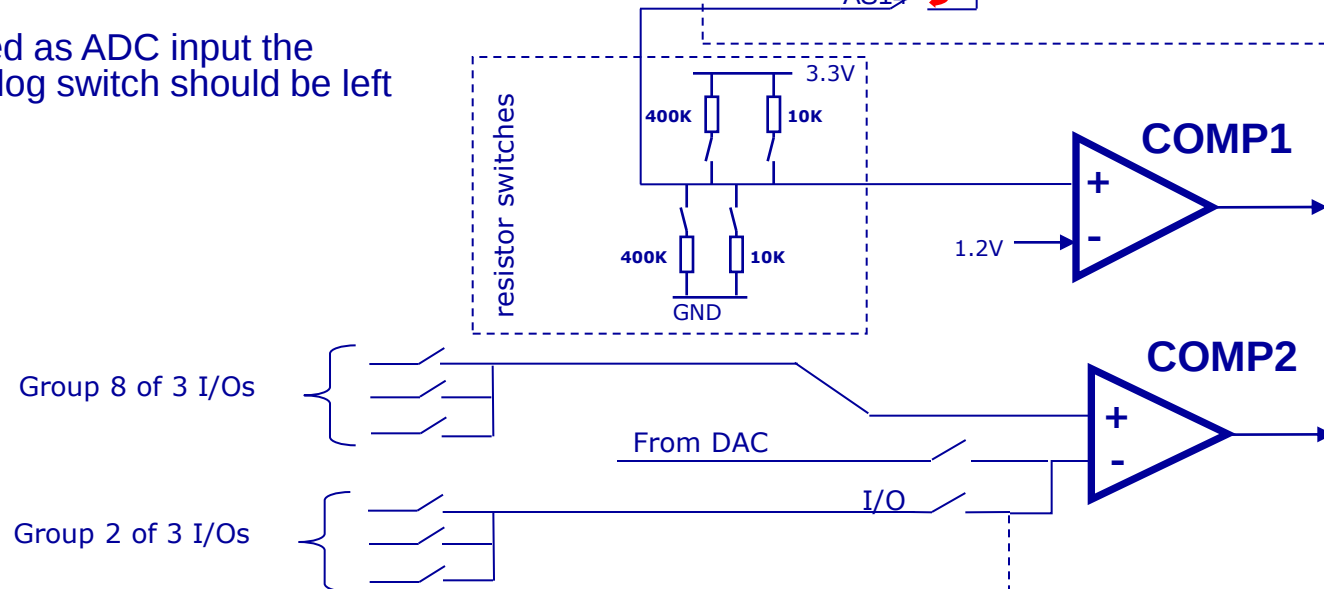
RI: Comparators input routing



- 24 programmable I/O switches in 8 groups of 3 I/Os and 10 Analog switches for comparators inputs routing



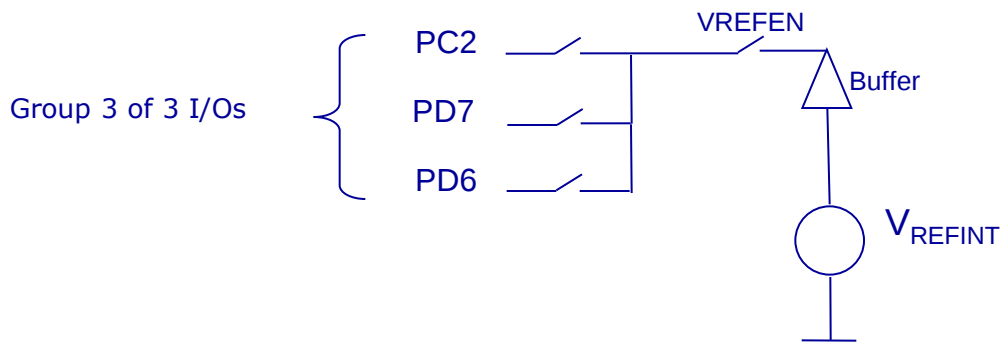
- When the IO is used as ADC input the corresponding Analog switch should be left open !
- example: ➡



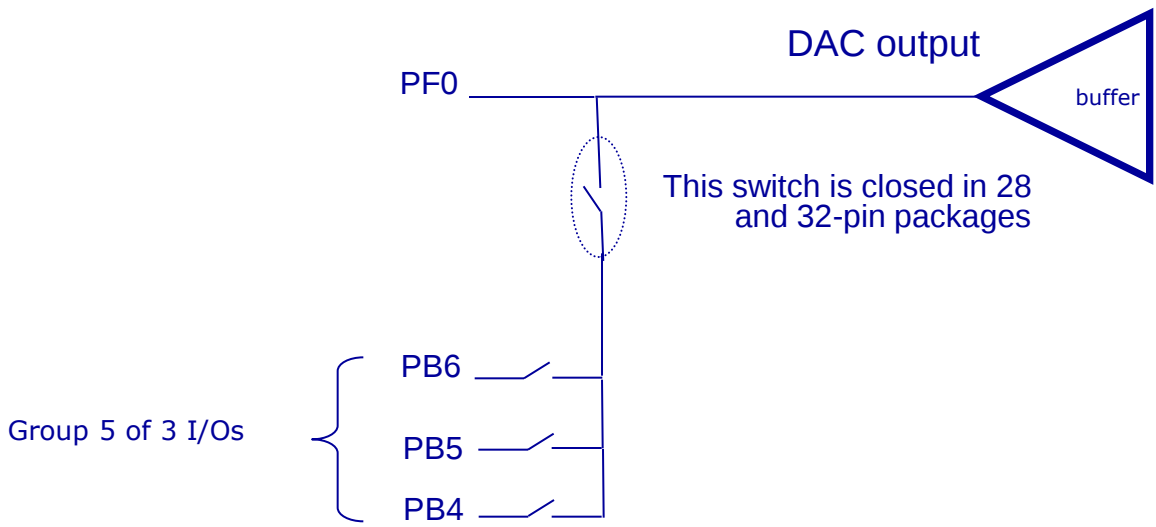
V_{REFINT} and DAC output routing to I/Os



- V_{REFINT} output can be routed to any I/O of group 3: PC2, PD7 or PD6



- For 28 and 32-pin packages, DAC output can be routed to any I/O of group 5: PB6, PB5 or PB4



- From how many I/Os the COMP1 “+” input can be selected ?

- How many IOs can be routed to the DAC output and how many to the V_{REFINT} voltage output ?

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