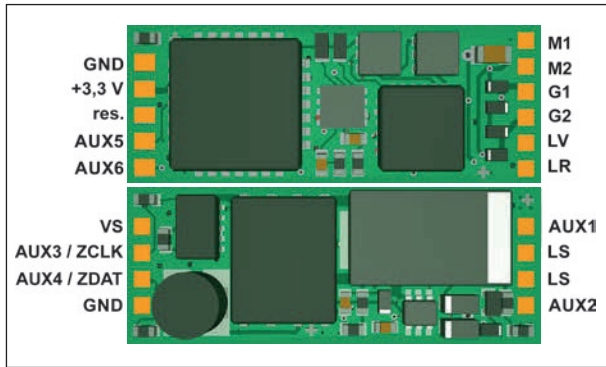




Doehler & Haass

# SD05A 2<sup>nd</sup> Generation



## Pin assignment

### Interface

- M1, M2**..... Motor connection 1, 2
- G1, G2**..... Track connection 1, 2
- LV, LR**..... Front light, rear light (each 150 mA)
- AUX1, AUX2**..... Additional function 1, 2 (each 300 mA)
- VS**..... Supply voltage (also for SUSI)
- ZCLK/AUX3**..... SUSI clock (or AUX3 unamplified) \*)
- ZDAT/AUX4**..... SUSI data (or AUX4 unamplified) \*)
- GND**..... Ground (0 V)
- LS**..... Speaker

### Five solder pads

- AUX5, AUX6**..... Unamplified function \*)
- res.**..... Please do not connect anything!
- +3,3 V**..... Electronic supply voltage (not for the user!)
- GND**..... Ground (0 V)

Specifications (2 <sup>nd</sup> Generation)	SD05A
Dimensions [mm]	19,9 x 7,6 x 3,1
<b>Driving characteristic values</b> Operating mode SX1, SX2, DCC, MM, DC-analog Total load Maximum motor current Maximum operating voltage 2 Function outputs for light: LV, LR (dimnable) 2 Function outputs: AUX1, AUX2 (dimnable) 4 Function outputs: AUX3, AUX4, AUX5, AUX6) With SUSI interface (if AUX3/AUX4 deactivated)	0,5 A 0,5 A 30 V each 150 mA each 300 mA unamplified X
<b>Sound characteristic values</b> Sampling rate Independent sound channels Memory size Memory period Maximum output rating	22 kHz 8 128 megabits up to 760 s 2,6/1,6 W (4/8 Ω)
<b>Connecting options</b> Without connection wires With ribbon cable for interface per NEM651 With connection wires	SD05A-0 SD05A-1 SD05A-3

### \*) Unamplified function outputs

As in case the unamplified function outputs (logic level 0 V - 3,3 V, max. 2 mA) cannot switch greater loads, switching amplifiers (MOSFET, bipolar transistors or the like) must be provided for consumers, which either require a higher supply voltage (> 3,3 V) or a higher current (> 2 mA).

If necessary: Connect blue wire (common return conductor) to VS. You can connect a buffer capacitor to VS (+) and GND (-).

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