

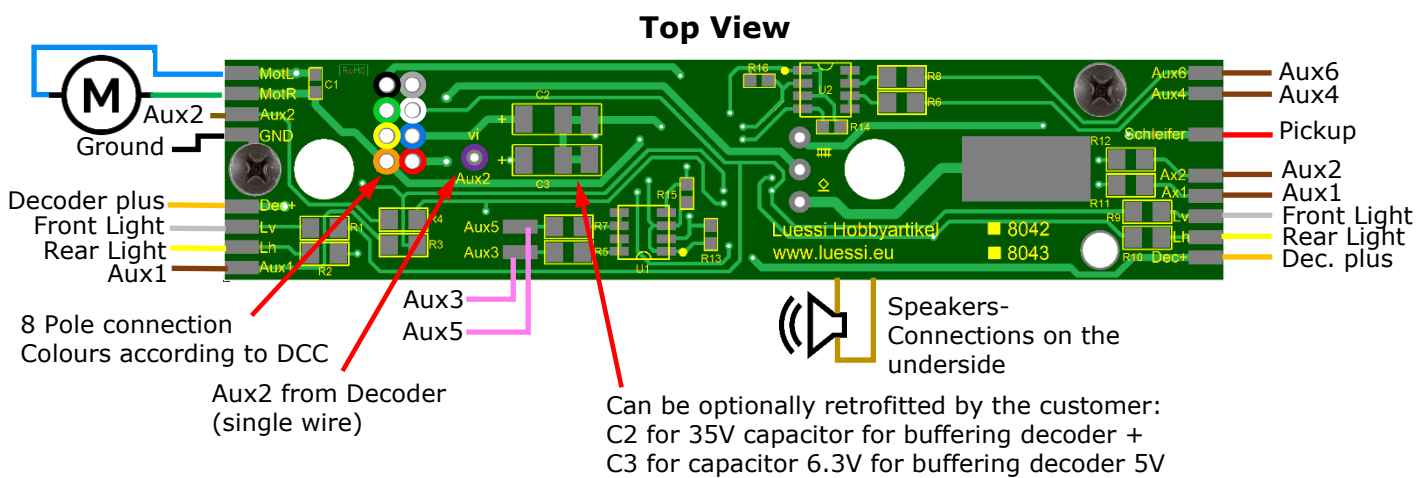
# Decoder circuit board for Märklin 12X / BR128, item 8042/8043

The circuit boards 8042 and 8043 have been developed for Märklin electric locomotives of the 12X / BR128 series to digitize them in the simplest and cleanest way. The PCBs are equipped with an 8 pole or 21MTC interface, all important connections are led out to large solder pads. The connections Aux3 to Aux6 are amplified on the PCB no. 8043 and are led out via resistors, so that LEDs can be connected directly to the PCB. With article 8042 these outputs are not amplified.

The PCBs have the same size of 100 x 22mm as the original PCB and therefore fit exactly into the Märklin locomotives instead of the original one and are fixed with the two existing screws.

## Connection

### Colors according to Märklin standard (where possible)



## Wire Colour Table

	Märklin	NEM (DCC)	Decoder Output
br/gn			Aux2
bl			Motor right
rd			Pickup
yw			Rear light
or			Decoder Plus (functions)
br/rd			Aux1
gr			Front light
br			Loco ground (wheels)
gn			Motor left

## Versions

8042 PCB for Märklin 12X / BR128, Aux3-6 not reinforced. 8 pole interface

8042mtc PCB for Märklin 12X / BR128, Aux3-6 not reinforced. 21mtc interface

8043mtc PCB for Märklin 12X / BR128, Aux3-6 reinforced. 21mtc interface

**Note:** Aux5 and 6 are not available on all decoders.