

## CANDrive Smart Dashboard Pin Assignment

For STM board 1(CAN Node 1)

Peripheral	Microcontroller Pin	Peripheral Pin
10k Potentiometer	5V	Vcc
	GND	GND
	PA1 (ADC3_IN1)	Out
L293D Motor Driver	PB1 (TIM3_CH4)	Pin 1 (Enable driver) - PWM gen.
	PE4, PE6	Pin 2,7 (Driver Input) - motor direction
	-	Pin 3,6 (Driver Output) - to the motor terminals
	GND	Pin 4,5
	-	Pin 8 (Vcc2) - Power Vcc for motor
	5V	Pin 16 (Vcc1) - 5V supply for logic translation
Infrared Sensor	3.3 V	Vcc
	PA6 (GPIO_EXTI6)	Out
	GND	GND
CAN Transceiver sn65hvd230	3.3V	Vcc
	PB8 (CAN RX)	Tranceiver Rx
	PB9 (CAN TX)	Tranceiver Tx
	GND	GND

For STM board 2(CAN Node 2)

Peripheral	Microcontroller Pin	Peripheral Pin
TMP102	3.3V	Vcc
	GND	GND
	PB10	SCL
	PB11	SDA
Reed Switch	3.3V	Vcc
	PA5	Out
	GND	GND
CAN Transceiver sn65hvd230	3.3V	Vcc
	PB8 (CAN RX)	Tranceiver Rx
	PB9 (CAN TX)	Tranceiver Tx
	GND	GND

## CAN Data Payload format

**MSB**

Byte 0	Byte 1-2	Byte 3	Byte 4-5	Byte 6-7
speed	distance travelled	temperature+Door	current	voltage
(data from CAN node 1)		(data from CAN node 2)		

**LSB**