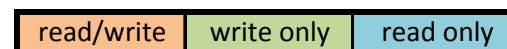
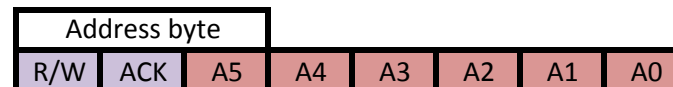


# BDC Driver Register map

Addr	data byte 1	data byte 2	data byte 3	data byte 4	Notes
0x00	msb motor 0 speed			lsb	int32, speed x 1000
0x01	msb motor 1 speed			lsb	int32, speed x 1000
0x02	msb motor 2 speed			lsb	int32, speed x 1000
0x03	msb motor 3 speed			lsb	int32, speed x 1000
0x04	msb encoder 0 ticks			lsb	int32
0x05	msb encoder 1 ticks			lsb	int32
0x06	msb encoder 2 ticks			lsb	int32
0x07	msb encoder 3 ticks			lsb	int32
0x08	P_0	I_0	D_0	multiplier	uint8, multiplier not in use
0x09	P_1	I_1	D_1	multiplier	uint8, multiplier not in use
0x10	P_2	I_2	D_2	multiplier	uint8, multiplier not in use
0x11	P_3	I_3	D_3	multiplier	uint8, multiplier not in use
0x12	reset ticks	reset driver	reset speed	reset energy	0xFF for reset
0x13	driv temp		core temp		uint16, temp x 10
0x14	input voltage		fault code		uint16, voltage x 1000
0x15	msb burnt energy sum			lsb	uint32, energy in Wh x 10
0x16	msb burnt energy motor 0			lsb	uint32, energy in Wh x 10
0x17	msb burnt energy motor 1			lsb	uint32, energy in Wh x 10
0x18	msb burnt energy motor 2			lsb	uint32, energy in Wh x 10
0x19	msb burnt energy motor 3			lsb	uint32, energy in Wh x 10
0x20	current motor 0		current motor 1		uint16 motor current x 1000
0x21	current motor 2		current motor 3		uint16 motor current x 1000
0x22	undervoltage threshold		overcurrent threshold		uint16_t x 1000



Fault code:							
b15	b14	b13	b12	b11	b10	b9	b8
TBA	TBA	System error	Undervoltage prot.	Overcurrent 3	Overcurrent 2	Overcurrent 1	Overcurrent 0

b7	b6	b5	b4	b3	b2	b1	b0
Voltage out of range	Rotor 3 stall	Rotor 2 stall	Rotor 1 stall	Rotor 0 stall	Over temp core	Over temp drv	Unknown error