NXP Semiconductors PCA9685

16-channel, 12-bit PWM Fm+ I2C-bus LED controller

Table 4. Register summary ...continued

Register# (decimal)	Register# (hex)	D7	D6	D5	D4	D3	D2	D1	D0	Name	Туре	Function	
62	3E	0	0	1	1	1	1	1	0	LED14_ON_L	read/write	LED14 output and brightness control byte 0	
63	3F	0	0	1	1	1	1	1	1	LED14_ON_H	read/write	LED14 output and brightness control byte 1	
64	40	0	1	0	0	0	0	0	0	LED14_OFF_L	read/write	LED14 output and brightness control byte 2	
65	41	0	1	0	0	0	0	0	1	LED14_OFF_H	read/write	LED14 output and brightness control byte 3	
66	42	0	1	0	0	0	0	1	0	LED15_ON_L	read/write	LED15 output and brightness control byte 0	
67	43	0	1	0	0	0	0	1	1	LED15_ON_H	read/write	LED15 output and brightness control byte 1	
68	44	0	1	0	0	0	1	0	0	LED15_OFF_L	read/write	LED15 output and brightness control byte 2	
69	45	0	1	0	0	0	1	0	1	LED15_OFF_H	read/write	LED15 output and brightness control byte 3	
	reserved for future use												
250	FA	1	1	1	1	1	0	1	0	ALL_LED_ON_L	write/read zero	load all the LEDn_ON registers, byte 0	
251	FB	1	1	1	1	1	0	1	1	ALL_LED_ON_H	write/read zero	load all the LEDn_ON registers, byte 1	
252	FC	1	1	1	1	1	1	0	0	ALL_LED_OFF_L	write/read zero	load all the LEDn_OFF registers, byte 0	
253	FD	1	1	1	1	1	1	0	1	ALL_LED_OFF_H	write/read zero	load all the LEDn_OFF registers, byte 1	
254	FE	1	1	1	1	1	1	1	0	PRE_SCALE[1]	read/write	prescaler for PWM output frequency	
255	FF	1	1	1	1	1	1	1	1	TestMode ^[2]	read/write	defines the test mode to be entered	
	All further a	All further addresses are reserved for future use; reserved addresses will not be acknowledged.											

^[1] Writes to PRE_SCALE register are blocked when SLEEP bit is logic 0 (MODE 1).

Remark: Auto Increment past register 69 will point to MODE1 register (register 0). Auto Increment also works from register 250 to register 254, then rolls over to register 0.

^[2] Reserved. Writes to this register may cause unpredictable results.