



# PCF50633 variant 09

Options for PCF50633/09/N3

IBCP-DS-003090 R-

Rev 0.1 – 2 July 2007

Variant Specification

## 1a Type information

<b>PMU</b>	<b>PCF50633</b>
<b>Silicon version</b>	<b>N3</b>
<b>Variant</b>	<b>09</b>
<b>Bond out</b>	<b>n.a.</b>
<b>Product specification<sup>1</sup></b>	<b>PCF50633UM2.00.pdf</b>

## 1b Document revision history

<b>Ver</b>	<b>Date</b>	<b>Description</b>	<b>Author</b>
0.1	02-Jul-2007	Initial version	MLA

<sup>1</sup> For reset settings is referred to the datasheet revision; unless otherwise specified

## 2 ON/OFF control (OOC)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
OOCMODE (10 <sub>HEX</sub> )	EXTON1_MODE (1,0)	EXTON1 mode selection 00: Wake-up by falling edge only 01: Wake-up by rising edge only 10: Wake-up by falling edge, rising edge sets the time-out timer to 8 seconds 11: Wake-up by rising edge, falling edge sets time-out timer to 8 seconds	00 (Wake-up by falling edge only)
	EXTON2_MODE (3,2)	EXTON2 mode selection Behaviour like EXTON1_MODE	01 (Wake-up by rising edge only)
	EXTON3_MODE (5,4)	EXTON3 mode selection Behaviour like EXTON1_MODE	00 (Wake-up by falling edge only)
	ONKEY_MODE (7,6)	ONKEY mode selection 00: Wake-up by falling edge only 01: Wake-up by falling edge, next 1 sec. low sets the time-out timer to 8 seconds. 10: Wake-up by falling edge, rising edge sets the time-out timer to 8 seconds. 11: Reserved	00 (Wake-up by falling edge only)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
OOCCTL (11 <sub>HEX</sub> )	ACTPHRST (1,0)	Selects activity phase to which host controller reset is related 00: related to activation phase 1 01: related to activation phase 2 10: related to activation phase 3 11: related to activation phase 4	11 (Related to activation phase 4)
	ACTCLK32ON (2)	Enables the 32kHz output in ACTIVE state	1 (32kHz output is enabled in ACTIVE state)
	HEARTBEAT (3)	Enables the Heartbeat mode for the KEEPACT input	0 (Heartbeat mode is disabled)
	USBATCHK (4)	Enables Vbat > VbatOK condition for transition to ACTIVE state	0 (USBATCHK is disabled)
	STBYCLK32ON (6)	Enables the 32kHz output in STANDBY state	1 (32kHz output is enabled in STANDBY state)

### 3 General Purpose In/Outputs (GPIO)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
GPIOCTL (13 <sub>HEX</sub> )	GPIO1DIR (0)	Direction of GPIO1: 0: Output, 1:Input	0 (Output)
	GPIO2DIR (1)	Direction of GPIO2: 0: Output, 1:Input	0 (Output)
	GPIO3DIR (2)	Direction of GPIO3: 0: Output, 1:Input	0 (Output)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
GPIO1CFG (14 <sub>HEX</sub> )	GPIO1SEL (2,0)	GPIO1 output signal selection 000: fixed '0' 001: Reserved 010: SYS pin voltage > V <sub>SYS</sub> OK 011: battery charging in progress 100: mobile mode: Adapter & USB absent 101: USB pin voltage > V <sub>USBPRES</sub> 110: activation phase 1 signal 111: fixed '1'	000 (Fixed '0')
	GPIOPOL (3)	GPIO1 output signal polarity: 0: no inversion, 1: inversion	0 (No inversion)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
GPIO2CFG (15 <sub>HEX</sub> )	GPIO2SEL (2,0)	GPIO2 output signal selection 000: fixed '0' 001: Reserved 010: SYS pin voltage > V <sub>SYS</sub> OK 011: battery charging in progress 100: mobile mode: Adapter & USB absent 101: USB pin voltage > V <sub>USBPRES</sub> 110: activation phase 2 signal 111: fixed '1'	000 (Fixed '0')
	GPIOPOL (3)	GPIO2 output signal polarity: 0: no inversion, 1: inversion	0 (No inversion)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
GPIO3CFG (16 <sub>HEX</sub> )	GPIO3SEL (2,0)	GPIO3 output signal selection 000: fixed '0' 001: Reserved 010: SYS pin voltage > V <sub>SYS</sub> OK 011: battery charging in progress 100: mobile mode: Adapter & USB absent 101: USB pin voltage > V <sub>USBPRES</sub> 110: activation phase 3 signal 111: fixed '1'	000 (Fixed '0')
	GPIOPOL (3)	GPIO3 output signal polarity: 0: no inversion, 1: inversion	0 (No inversion)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
GPOCFG (17 <sub>HEX</sub> )	GPOSEL (2,0)	GPO output signal selection 000: fixed '0' 001: LED external NFET drive signal 010: SYS pin voltage > V <sub>SYSOK</sub> 011: battery charging in progress 100: mobile mode: Adapter & USB absent 101: USB pin voltage > V <sub>USBPRES</sub> 110: activation phase 4 signal 111: fixed '1'	000 (Fixed '0')
	GPOPOL (3)	GPO output signal polarity: 0: no inversion, 1: inversion	0 (No inversion)

#### 4 Voltage monitors

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
BVMCTL (18 <sub>HEX</sub> )	BVMTHRSHLD (3,1)	Threshold voltage 000: n.a. 001: 2.80V 010: 2.90V 011: 3.00V 100: 3.10V 101: 3.20V 110: 3.30V 111: 3.40V	110 (3.30V)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
SVMCTL (19 <sub>HEX</sub> )	SVMTHRSHLD (3,1)	Threshold voltage 000: n.a. 001: 2.80V 010: 2.90V 011: 3.00V 100: 3.10V 101: 3.20V 110: 3.30V 111: 3.40V	011 (3.00V)

## 5 AUTO, DOWN1 and DOWN2 switching regulators

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
AUTOOUT (1A <sub>HEX</sub> )	AUTO_OUT (7,0)	Output voltage setting  00101111: 1.800V ... 01010011: 2.700V ... 01101010: 3.275V 01101011: 3.300V 01101100: 3.325V 01111111: 3.800V (max) ... 11111110: 3.800V 11111111: 3.800V	<b>01011111 (3.000Volt)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
AUTOENA (1B <sub>HEX</sub> )	AUTO_ON (0)	If set, converter is on	<b>0 (Not set, converter is OFF)</b>
	AUTO_P1C (1)	If set, converter is on when GPIO1 = 1	<b>0 (Not set)</b>
	AUTO_P2C (2)	If set, converter is on when GPIO2 = 1	<b>0 (Not set)</b>
	AUTO_P3C (3)	If set, converter is on when GPIO3 = 1	<b>0 (Not set)</b>
	AUTO_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested Behaviour
AUTOMXC (1D <sub>HEX</sub> )	AUTO_MAXC (5,0)	Sets current limit of AUTO converter lin, max = AUTO_MAXC * 40mA	<b>001010 (Current limiter set for 400mA)</b>
	AUTOMAXCMOD (6)	Current limit mode: 0: limiting at start-up only 1: limiting always active	<b>0 (Limiting at start-up only)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested Behaviour
DOWN1OUT (1E <sub>HEX</sub> )	DOWN1_OUT (7,0)	Output voltage setting 00000000: 0.625V ... 00010110: 1.175V 00010111: 1.200V 00011000: 1.225V ... 00100011: 1.500V ... 00101111: 1.800V ... 01011111: 3.000V (max) ... 11111110: 3.000V 11111111: 3.000V	<b>00100011 (1.500Volt)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested Behaviour
DOWN1ENA (1F <sub>HEX</sub> )	DOWN1_ON (0)	If set, converter is on	<b>1 (Set, converter is ON)</b>
	DOWN1_P1C (1)	If set, converter is on when GPIO1 = 1	<b>0 (Not set)</b>
	DOWN1_P2C (2)	If set, converter is on when GPIO2 = 1	<b>0 (Not set)</b>
	DOWN1_P3C (3)	If set, converter is on when GPIO3 = 1	<b>0 (Not set)</b>
	DOWN1_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
DOWN1MXC (21 <sub>HEX</sub> )	DOWN1_MAXC (5,0)	Sets current limit of DOWN1 converter lin, max = DOWN1_MAXC * 15mA	<b>011010 (Current limiter set for 390mA)</b>
	DOWN1MAXCMOD (6)	Current limit mode: 0: limiting at start-up only 1: limiting always active	<b>0 (Limiting at start-up only)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
DOWN2OUT (22 <sub>HEX</sub> )	DOWN2_OUT (7,0)	Output voltage setting 00000000: 0.625V ... 00010110: 1.175V 00010111: 1.200V 00011000: 1.225V ... 00100011: 1.500V ... 00101111: 1.800V ... 01011111: 3.000V (max) ... 11111110: 3.000V 11111111: 3.000V	<b>00101111 (1.800Volt)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
DOWN2ENA (23 <sub>HEX</sub> )	DOWN2_ON (0)	If set, converter is on	<b>1 (Set, converter is ON)</b>
	DOWN2_P1C (1)	If set, converter is on when GPIO1 = 1	<b>0 (Not set)</b>
	DOWN2_P2C (2)	If set, converter is on when GPIO2 = 1	<b>0 (Not set)</b>
	DOWN2_P3C (3)	If set, converter is on when GPIO3 = 1	<b>0 (Not set)</b>
	DOWN2_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>00 (Activation phase 1 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
DOWN2MXC (25 <sub>HEX</sub> )	DOWN2_MAXC (5,0)	Sets current limit of DOWN2 converter lin, max = DOWN2_MAXC * 15mA	<b>011010 (Current limiter set for 390mA)</b>
	DOWN2MAXCMOD (6)	Current limit mode: 0: limiting at start-up only 1: limiting always active	<b>0 (Limiting at start-up only)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MEMLDOOUT (26 <sub>HEX</sub> )	MEMLDO_OUT (4,0)	Output voltage setting: $0.9v + V_{SET} * 0.1V$ 00000: 0.9V 00001: 1.0V ... 11000: 3.3V ... 11011: 3.6V 11111: 3.6V	<b>01001 (1.800Volt)</b>
	MEMLDO_SW (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested Behaviour
MEMLDOENA (27 <sub>HEX</sub> )	MEMLDO_ON (0)	If set, regulator is on	<b>1 (Set, regulator is ON)</b>
	MEMLDO_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	MEMLDO_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	MEMLDO_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	MEMLDO_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>00 (Activation phase 1 selected)</b>



## 6 Linear regulators

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO1OUT (2D <sub>HEX</sub> )	LDO1_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: 0.9V 00001: 1.0V ... 11000: 3.3V ... 11011: 3.6V 11111: 3.6V	<b>10101 (3.0Volt)</b>
	LDO1_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO1ENA (2E <sub>HEX</sub> )	LDO1_ON (0)	If set, regulator is on	<b>1 (Set, regulator is ON)</b>
	LDO1_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO1_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	LDO1_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO1_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>00 (Activation phase 1 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO2OUT (2F <sub>HEX</sub> )	LDO2_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: 0.9V 00001: 1.0V ... 11000: 3.3V ... 11011: 3.6V 11111: 3.6V	<b>01001 (1.8Volt)</b>
	LDO2_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO2ENA (30 <sub>HEX</sub> )	LDO2_ON (0)	If set, regulator is on	<b>0 (Not set, regulator is OFF)</b>
	LDO2_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO2_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	LDO2_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO2_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO3OUT (31 <sub>HEX</sub> )	LDO3_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: 0.9V 00001: 1.0V ... 11000: 3.3V ... 11011: 3.6V 11111: 3.6V	<b>00011 (1.2Volt)</b>
	LDO3_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO3ENA (32 <sub>HEX</sub> )	LDO3_ON (0)	If set, regulator is on	<b>1 (Set, regulator is ON)</b>
	LDO3_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO3_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	LDO3_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO3_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>01 (Activation phase 2 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO4OUT (33 <sub>HEX</sub> )	LDO4_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: 0.9V 00001: 1.0V ... 10111: 3.6V 11111: 3.6V	<b>10101 (3.0Volt)</b>
	LDO4_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO4ENA (34 <sub>HEX</sub> )	LDO4_ON (0)	If set, regulator is on	<b>0 (Not set, regulator is OFF)</b>
	LDO4_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO4_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	LDO4_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO4_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>11 (Activation phase 4 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO5OUT (35 <sub>HEX</sub> )	LDO5_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: invalid 00001: 1.0V ... 10111: 3.6V 11111: 3.6V	<b>10011 (2.8Volt)</b>
	LDO5_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO5ENA (36 <sub>HEX</sub> )	LDO5_ON (0)	If set, regulator is on	<b>0 (Not set, regulator is OFF)</b>
	LDO5_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO5_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	LDO5_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO5_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO6OUT (37 <sub>HEX</sub> )	LDO6_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: invalid 00001: 1.0V ... 11000: 3.3V ... 11011: 3.6V 11111: 3.6V	<b>10101 (3.0Volt)</b>
	LDO6_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
LDO6ENA (38 <sub>HEX</sub> )	LDO6_ON (0)	If set, regulator is on	<b>0 (Not set, regulator is OFF)</b>
	LDO6_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	LDO6_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not Set)</b>
	LDO6_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	LDO6_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
HCLDOOUT (39 <sub>HEX</sub> )	HCLDO_OUT (4,0)	Output voltage setting: $0.9V + V_{SET} * 0.1V$ 00000: invalid 00001: 1.0V ... 10111: 3.2V 11111: 3.6V	<b>11000 (3.3Volt)</b>
	HCLDO_SWMOD (5)	If set, switch mode is selected	<b>0 (Not set, switch mode is OFF)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
HCLDO ENA (3A <sub>HEX</sub> )	HCLDO_ON (0)	If set, regulator is on	<b>0 (Not set, regulator is OFF)</b>
	HCLDO_P1C (1)	If set, regulator is on when GPIO1 = 1	<b>0 (Not set)</b>
	HCLDO_P2C (2)	If set, regulator is on when GPIO2 = 1	<b>0 (Not set)</b>
	HCLDO_P3C (3)	If set, regulator is on when GPIO3 = 1	<b>0 (Not set)</b>
	HCLDO_ENA_ACT (5,4)	Selects activation phase 00: Phase 1 01: Phase 2 10: Phase 3 11: Phase 4	<b>10 (Activation phase 3 selected)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
STBYCTL1 (3B <sub>HEX</sub> )	LDO1_ENA_STBY (0)	If set, LDO is on STANDBY state	0 (Not set)
	LDO2_ENA_STBY (2)	If set, LDO is on STANDBY state	0 (Not set)
	LDO3_ENA_STBY (4)	If set, LDO is on STANDBY state	0 (Not set)
	LDO4_ENA_STBY (6)	If set, LDO is on STANDBY state	0 (Not set)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
STBYCTL2 (3C <sub>HEX</sub> )	LDO5_ENA_STBY (0)	If set, LDO is on STANDBY state	0 (Not set)
	LDO6_ENA_STBY (2)	If set, LDO is on STANDBY state	0 (Not set)
	HCLDO_ENA_STBY (4)	If set, LDO is on STANDBY state	0 (Not set)
	MEMLDO_ENA_STBY (6)	If set, LDO is on STANDBY state	0 (Not set, regulator OFF in STANDBY state)



## 7 Main Battery Charger (MBC)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC1 (43 <sub>HEX</sub> )	CHGENA (0)	0: Charger disabled, Charger detection still active 1: Charger enabled	0 (Charger disabled)
	AUTOSTOP (1)	0: Automatic charge termination disabled. Charging is stopped by setting CHGENA or by time out of the watchdog timer 1: Automatic charging termination enabled. Charging is stopped when charging current falls below the CUTOFF current value or by time out of the watchdog timer	1 (Automatic charge termination enabled)
	AUTORES (2)	1 If set, automatic charge resume is enabled	1 (Set, automatic charge resume enabled)
	RESUME (3)	If set, charging is resumed. No effect when AUTORES = 1	0 (Not set)
	RESTART (4)	If set, charging process is restarted after halt condition	0 (Not set)
	PREWDTIME (5)	Maximum charging time during pre-charge phase 0: 30 minutes 1: 60 minutes	1 (60 minutes)
	WDTIME (7, 6)	Maximum charging time after pre-charge phase 00: 1.0 hour 01: 2.0 hours 10: 4.0 hours 11: 6.0 hours	10 (4.0 hours)

Register (Address)	Symbol (Bit)	Possible options	Requested Behaviour
MBCC2 (44 <sub>HEX</sub> )	VBATCOND (1,0)	V <sub>BATCOND</sub> level setting 00: 2.70V 01: 2.85V 10: 3.00V 11: 3.15V	01 (V <sub>BATCOND</sub> = 2.85V)
	VMAX (5,2)	V <sub>MAX</sub> level setting: 0000: 4.00V 0001: 4.02V 0010: 4.04V 0011: 4.06V ... 1010: 4.20V 1011: 4.22V ... 1111: 4.30V	1010 (4.2Volt)
	VRESDBTIME (7)	Debounce time for V <sub>RES</sub> 0: 32 seconds 1: 64 seconds	1 (64 seconds debounce time)

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC3 (45 <sub>HEX</sub> )	PRECHG CUR (7,0)	Pre-charge current level: 0000 0000: 0/255 * I <sub>SET</sub> 0000 0001: 1/255 * I <sub>SET</sub> ... 1111 1110: 254/255 * I <sub>SET</sub> 1111 1111: 255/255 * I <sub>SET</sub>	<b>00001111</b> <b>(15/255 * I<sub>SET</sub>: 60mA)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC4 (46 <sub>HEX</sub> )	FSTCHG CUR1 (7,0)	Fast charge current level: 0000 0000: 0/255 * I <sub>SET</sub> 0000 0001: 1/255 * I <sub>SET</sub> ... 1111 1110: 254/255 * I <sub>SET</sub> 1111 1111: 255/255 * I <sub>SET</sub>	<b>10011001</b> <b>(153/255 * I<sub>SET</sub>: 600mA)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC5 (47 <sub>HEX</sub> )	FSTCHG CUR2 (7,0)	Fast charge current level (USB): 0000 0000: 0/255 * I <sub>SET</sub> 0000 0001: 1/255 * I <sub>SET</sub> ... 1111 1110: 254/255 * I <sub>SET</sub> 1111 1111: 255/255 * I <sub>SET</sub>	<b>10011001</b> <b>(153/255 * I<sub>SET</sub>: 600mA)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC6 (48 <sub>HEX</sub> )	CUTOFF CUR (4,0)	Cutoff current level, used for battery full detection in CV mode: 00000: 1/32 * FSTCHG CUR 00001: 2/32 * FSTCHG CUR <sub>T</sub> ... 11110: 31/32 * FSTCHG CUR 11111: 32/32 * FSTCHG CUR	<b>00011</b> <b>(3/32 * I<sub>FSTCHG CUR</sub>: 60mA)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC7 (49 <sub>HEX</sub> )	USBDEVSTAT (1,0)	USB device status setting: 00: configured for 100mA 01: configured for 500mA 10: configured for 1000mA 11: suspend	<b>01 (USB = 500mA)</b>
	BATTEMPENA (2)	If set, battery temperature is measured and has impact on MBC state machine	<b>1 (Set, battery temperature impacts state machine)</b>
	BATSYSIMAX (7,6)	Maximum BAT-SYS current in ideal diode mode: 00: 1.6 A 01: 1.8 A 10: 2.0 A 11: 2.2 A	<b>11 (2.2A)</b>

Register (Address)	Symbol (Bit)	Possible options	Requested behaviour
MBCC8 (4A <sub>HEX</sub> )	NTCLVT (3,0)	Defines the NTC low voltage threshold level in 50mV steps: 0000: 0.60V 0001: 0.65V ... 1110: 1.30V 1111: 1.35V	<b>1011 (1.15V)</b>
	USBENASUS	If set, the USB-System switch is on when USB is in suspend mode.	<b>0 (Not set, USB-System switch is OFF when USB is in suspend mode)</b>