OVC3860 Persistent Store Key Settings Application Notes

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Contents

1.Introduction

Persistent Store Keys (PSKeys) are necessary for configuring OVC3860 RevE bluetooth chip. They are stored in EEPROM which is connected to OVC3860 by IIC bus. When power on, the chip will retrieve these configuration and apply it.

The document will describe the meaning and usage of these Persistent Store keys and how to configure them with the provided tools.

Note: Some of the keys are only used by the chip firmware programmer. The description of these keys may not be understandable by the reader who did not design this firmware. Please just ignore these keys and descriptions and use the default value. If there's any unsolved problem, you can contact our FAE for help. We may change some PSKeys or add code patch to fix it.

2.PSKeys Description and Settings

ool_reg04~0d

Key Name	Key Number	Default Value	Range(byte)
ool_reg04~0d	0~6	N/A	1

To set OOL register. Only for internal use. Please don't change.

btsys_mode

Key Name	Key Number	Default Value	Range(byte)
btsys_mode	7	0x06	1

Bluetooth work mode
0x00: hci uart mode
0x06: stereo headset mode

other: reserved

sysclk

Key Name	Key Number	Default Value	Range(byte)
sysclk	8	0x01	1

Set cpu system clock frequency
0x00: 48MHz
0x01: 24MHz (default)
0x02: 12MHz
0x03: 36MHz

lowpow_clk

Key Name	Key Number	Default Value	Range(byte)
lowpow_clk	9	0x1e	1

Bit 0: Select external 32.768k crystal as low power clock
Bit 1: Select internal 31.25k lpo as low power clock
Bit 2: Enable deep sleep mode during page scan interval
Bit 3: Enable deep sleep mode during sniff mode interval
Bit 4: Skip sync error info mask
Bit 7: Enable deep sleep during both scan interval
Other: Reserved

~~idle_clk~~

~~con_clk~~

waketime

Key Name	Key Number	Default Value	Range(byte)

waketime	12	0x10	1

This PS key sets preserved time (slot) before system enter next sniff interval from low power mode (deep sleep mode)

radio_skew

Key Name	Key Number	Default Value	Range(byte)
radio_skew	13	0x0f	1

Radio skew register

clk_recov

Key Name	Key Number	Default Value	Range(byte)
clk_recov	14	0x00	1

BIT0: If set this bit, it will be tuned one step at every adjustment. Default tune two step at every adjustment.
BIT2: Enable auto connect feature.
Other: Reserved.

diag_port

Key Name	Key Number	Default Value	Range(byte)
diag_port	15	0x00	1

Diagnostic port register low 8 bit

sys_debug_ctrl

Key Name	Key Number	Default Value	Range(byte)
sys_debug_ctrl	16	0x00	1

System debug control register low 8 bit

uart_baudrate

Key Name	Key Number	Default Value	Range(byte)
uart_baudrate	17	0x08	1

This PS key sets UART baud rate. The corresponding setting and baud rate is as follows:
921600: 0x0b
460800: 0x0a
230400: 0x09
115200: 0x08
57600: 0x07
38400: 0x06
19200: 0x05
14400: 0x04
9600: 0x03
4800: 0x02
2400: 0x01
1200: 0x00

gpioA_sec_func

Key Name	Key Number	Default Value	Range(byte)
gpioA_sec_func	18	0x60	1

This PS key sets gpio port A second function.
BIT0: 0: GPIO Mode 1: LED0
BIT1: 0: GPIO Mode 1: LED1
BIT2: 0: GPIO Mode 1: ANT_TXEN
BIT3: 0: GPIO Mode 1: ANT_RXEN
BIT4: 0: GPIO Mode 1: EXT_INTR4
BIT5: 0: GPIO Mode 1: EXT_INTR5
BIT6: 0: GPIO Mode 1: EXT_INTR6

BIT7: 0: GPIO Mode 1: EXT_INTR7

gpioB_sec_func

Key Name	Key Number	Default Value	Range(byte)
gpioB_sec_func	19	0xf0	1

This PS key sets gpio port B second function.
BIT0: 0: GPIO Mode 1: SSP_RX
BIT1: 1: GPIO Mode 1: SSP_TX
BIT2: 2: GPIO Mode 1: SSP_FRM
BIT3: 3: GPIO Mode 1: SSP_CLK
BIT4: 0: GPIO Mode 1: EXT_INTR0
BIT5: 0: GPIO Mode 1: EXT_INTR1
BIT6: 0: GPIO Mode 1: EXT_INTR2
BIT7: 0: GPIO Mode 1: EXT_INTR3

~~auto_conn_time~~

sbc_max_mute_num

Key Name	Key Number	Default Value	Range(byte)
sbc_max_mute_num	21	0x06	1

This PS key sets the threshold number of receive mute packet, if reach the setting value, system will close external audio PA.

gpioA_inout_sel

Key Name	Key Number	Default Value	Range(byte)

gpioA_inout_sel	22	0x91	1

This PS key sets gpio port A direction:
BIT[0-7]: 0: input 1: output.

gpioB_inout_sel

Key Name	Key Number	Default Value	Range(byte)
gpioB_inout_sel	23	0xff	1

This PS key sets gpio port B direction:
BIT[0-7]: 1: input 0: output.

local_bdaddr

Key Name	Key Number	Default Value	Range(byte)
local_bdaddr	24	0x001f8108230C	6

Set the BD Address of the device

tester_addr

Key Name	Key Number	Default Value	Range(byte)
tester_addr	25	0x001f81bdbdbd	6

If tester bluetooth address point to this value, the bluetooth chip will auto enter device test mode and auto accept connection request. Check **option_select** bit1.

classofdevice

Key Name	Key Number	Default Value	Range(byte)
classofdevice	26	0x240404	3

This PS key sets chip Class of Device

clk_accuracy

Key Name	Key Number	Default Value	Range(byte)
clk_accuracy	27	0x00fa	2

This PS key sets chip clock maximum drift (ppm), and this value will used to computed sync window size.

clk_dis_reg

Key Name	Key Number	Default Value	Range(byte)
clk_dis_reg	28	0x0000	2

This PS key sets chip clock disable register

opccr_reg

Key Name	Key Number	Default Value	Range(byte)
opccr_reg	29	0x2f	1

This PS key sets chip Oscilliator & PLL Clock Config register (0x10000000)

localfeatures0~5

Key Name	Key Number	Default Value	Range(byte)
localfeatures0	30	0xff	1
localfeatures1	31	0x3e	1
localfeatures2	32	0x0d	1

localfeatures3	33	0x76	1
localfeatures4	34	0x80	1
localfeatures5	35	0x01	1

These PS keys set chip link manager device features mask. Refer to Bluetooth Spec V2.1, Volume 2, Part C, 3.3 FEATURE MASK DEFINITION, page 220 of 906.

option_flag

Key Name	Key Number	Default Value	Range(byte)
option_flag	36	0xe0	1

This PS key sets chip operation mode
BIT 0: By pass ool(on-off logic) module for bluetooth speaker application
BIT1: By pass handsfree and headset profile for bluetooth speaker application
BIT2: Disable PMU(power management unit) interrupt
BIT3: Enable power off when first power on from deep discharge
BIT4: Reserved
BIT5: Add GPIO A4 to control external audio PA
BIT6: High level to control audio PA enable
BIT7: Add function to disconnect all link by vlong press key

reg_enbpreset

Key Name	Key Number	Default Value	Range(byte)
reg_enbpreset	37	0x0020f020	4

sys_pllclk

Key Name	Key Number	Default Value	Range(byte)

sys_pllclk	38	0x88ff	2

Set system pll debounce clock register

ool_spi_clkdiv

Key Name	Key Number	Default Value	Range(byte)
ool_spi_clkdiv	39	0x60	3

Set the ool spi clock divisor: spi clock = 48MHz/(spi_clkdiv*2).

mute_opt_flag

Key Name	Key Number	Default Value	Range(byte)
mute_opt_flag	40	0x03	1

BIT0-1: 00: no mute
BIT0-1: 01: mute A LAW
BIT0-1: 10: mute U LAW
BIT0-1: 11: mute CVSD
BIT2: read ool pmu interrupt status by ool mode.
BIT3: always keep codec clock enable.
BIT5: didn't change volume when Recv AT+VGS command.
BIT6: disconnect another avdtp l2cap connection during avdtp closed state.
Other: Reserved

sleep_delay_count

Key Name	Key Number	Default Value	Range(byte)
sleep_delay_count	41	0x04	1

Set delay number of sniff interval slot to allow deep sleep mode

Idle_ledoff_cnt

Key Name	Key Number	Default Value	Range(byte)
Idle_ledoff_cnt	42	0x04	1

Keep led off ((Idle_ledoff_cnt-1)*1.280s) Under idle deep sleep mode

idle_waketime

Key Name	Key Number	Default Value	Range(byte)
idle_waketime	43	0x10	1

This PS key sets preserved time (slot) before system enter next scan interval from low power mode (deep sleep mode) .

sniff_led_cnt

Key Name	Key Number	Default Value	Range(byte)
sniff_led_cnt	44	0x04	1

Keep led on (sniff_led_cnt*1000/sniff_interval/4 and off another ¾ time Under sniff deep sleep mode

ledmode

Key Name	Key Number	Default Value	Range(byte)
ledmode	45	0xe7	1

This PS key sets chip led mode under deep sleep mode

BIT0: led is flicker under idle state at deep sleep mode.
BIT1: led is flicker under connected state at deep sleep mode.
BIT2: Reserved
BIT3: Set SBC interrupt trigger level to((0x60<<8)+128) value, else set level to ((0x40<<8)+128).
BIT4: Keep audio PA state if receive mute data, default control external audio PA if receive mute data.
BIT5: Enable VLONG Press key function to enable active disconnect function.
BIT6: Enable scheme audio auto transfer if incoming call.
BIT7: Disable create sco connection function.

idle_wakecount

Key Name	Key Number	Default Value	Range(byte)
idle_wakecount	46	0x04	1

This PS key sets how many page scan period not to allow enter deep sleep if system wake up by external interrupt.

master_sched_count

Key Name	Key Number	Default Value	Range(byte)
master_sched_count	47	0x02	1

This PS key sets master device continue to do schedule number times until recv ack

option_select

Key Name	Key Number	Default Value	Range(byte)
option_select	48	0x7c	2

BIT0: Accept connection request with role switch to be master.
BIT1: Allow device enter test mode when tester address equal bluetooth tester address which stored in eeprom. Check **tester_addr**.
BIT2: Fast release link.
BIT3: Set default poll interval from 0x28 to 0x14.
BIT4: Master will send poll continuously until receive ack from slave.
BIT5: If rxbit jump exception, skip this sync operation.
BIT6: Read PMU irq status after wake up from deep sleep.
BIT7: Keep audio codec opened.

sleep_intcount

Key Name	Key Number	Default Value	Range(byte)
sleep_intcount	49	0x000001ff	4

This PS key sets gpio external interrupt count (32000/1000-1)<<4 + 0x0f 16ms count

wd_loadvalue

Key Name	Key Number	Default Value	Range(byte)
wd_loadvalue	50	0x0000	2

This PS key sets watchdog load value, if watchdog is not feed in wd_loadvalue*1.36 ms , reset will be done. If set 0, then watchdog is disable.

rf_regs00~a8

Key Name	Key Number	Default Value	Range(byte)
rf_regs00~a8	51~194		144

These PS keys is for adjust RF parameters.

lvd_reserved

Key Name	Key Number	Default Value	Range(byte)
lvd_reserved	195	0x20	1

The lvd interrupt pulse number of threshold to produce LVD warning

app_btn_num

Key Name	Key Number	Default Value	Range(byte)
app_btn_num	196	0x05	1

Set button number 5 button and 6 button solutions are supported.

dure_short

Key Name	Key Number	Default Value	Range(byte)
dure_short	197	0x03	1

Set the short press duration. [2, 20] defines the short press duration 100 ~ 1000 ms

dure_long

Key Name	Key Number	Default Value	Range(byte)
dure_long	198	0x1e	1

Set the long press(Hold3) duration .[10, 160] defines the long press(Hold3) duration 500 ~ 8000 ms

dure_vlong

Key Name	Key Number	Default Value	Range(byte)
dure_vlong	199	0x30	1

Set the very long press(Hold 5) duration. [20, 240] defines the very long press(Hold 5) duration 1000 ~12000 ms

dure_repeat

Key Name	Key Number	Default Value	Range(byte)
dure_repeat	200	0x08	1

Set repeat button press duration.[2, 100], 100-5000ms

dure_dshort_interval

Key Name	Key Number	Default Value	Range(byte)
dure_dshort_interval	201	0x08	1

This pskey sets two short press interval : dure_dshort_interval*50 ms

dure_hold

Key Name	Key Number	Default Value	Range(byte)
dure_hold	202	0x14	1

This pskey sets button press hold indication: volume + - and prev music, next music indication. Default is 20*50 ms

func_vol1_short

Key Name	Key Number	Default Value	Range(byte)
func_vol1_short	203	0x00	1

This pskey sets short press volume 1 indicate function
0: volume control -
1: prev music
2: rewind
3: stop music
4: play/pause music

func_vol1_hold

Key Name	Key Number	Default Value	Range(byte)
func_vol1_hold	204	0x00	1

This pskey sets hold press volume 1 indicate function
0: volume control -
1: prev music
2: rewind
3: stop music
4: play/pause music

func_vol2_short

Key Name	Key Number	Default Value	Range(byte)
func_vol2_short	205	0x00	1

This pskey sets short press volume 2 indicate function
0: volume control +
1: next music
2: rewind
3: stop music
4: play/pause music

dure_vol2_hold

Key Name	Key Number	Default Value	Range(byte)
dure_vol2_hold	206	0x00	1

This pskey sets hold press volume 2 indicate function
0: volume control +
1: next music
2: rewind
3: stop music
4: play/pause music

on_acok

Key Name	Key Number	Default Value	Range(byte)
on_acok	207	0x00	1

0: Plug in ac_adapter, didn't control led flick by sw.
1: Plug in ac_adapter, control led flick by sw.

app_status_num

Key Name	Key Number	Default Value	Range(byte)
app_status_num	208	0x0c	1

This indicate the number of configured led status.

led_para[0]~[11]

Key Name	Key Number	Default Value	Range(byte)

led_para[x].app_status	209~280	See below	1
led_para[x].led_on_time	209~280	See below	1
led_para[x].led_off_time	209~280	See below	1
led_para[x].led_repeat_time	209~280	See below	1
led_para[x].led_flash_num	209~280	See below	1
led_para[x].led_color	209~280	See below	1

The led_para[] define the LED indication when in the particular state.

app_status:This parameter indicates the application status.(1~12)
led_on_time: This parameter x 10ms indicates the led on time in 1 cycle .
led_off_time: This parameter x 10ms indicates the led off time in 1 cycle.
led_repeat_time: This parameter x 50ms indicates the led off time in 1 cycle.
led_flash_num: This parameter indicates the number of flashes in 1 cycle.(1~15)
led_color: This parameter indicates which led is configured.(0~3)

app_status	Description
1	Low battery led
2	Standby state led with no paired
3	IDLE state with paired
4	Pairing led
5	Connected or audio connected
6	Ringing led
7	Audio connected and talking
8	Power off led

9	Power on led
10	Paired ok led
11	AV connected led
12	AV music playing

led_color	Description
0	Blue Led
1	Red Led
2	Green Led
3	Blue+Red

Default Value:

	app_status	led_on_time	led_off_time	led_repeat_time	led_flash_num	led_color
led_para[0]	0x02	0x14	0x5a	0x10	0x01	0x00
led_para[1]	0x03	0x0a	0x22	0x26	0x01	0x00
led_para[2]	0x04	0x19	0x19	0x00	0x01	0x03
led_para[3]	0x05	0x08	0x22	0x32	0x02	0x00
led_para[4]	0x07	0x08	0x26	0x28	0x03	0x00

led_para[5]	0x01	0x05	0x05	0x13	0x01	0x01
led_para[6]	0x06	0x14	0x14	0x04	0x02	0x00
led_para[7]	0x08	0x14	0x1e	0x00	0x03	0x00
led_para[8]	0x09	0x0f	0x0f	0x00	0x05	0x00
led_para[9]	0x0a	0x0a	0x0a	0x00	0x06	0x00
led_para[10]	0x0b	0x0a	0x1e	0x3c	0x04	0x00
led_para[11]	0x0c	0x0a	0x1e	0x3c	0x04	0x00

tone_conf[0]~[11]

Key Name	Key Number	Default Value	Range(byte)
tone_para[x].size_array	281~340	N/A	1
tone_para[x].tone_array[0]~[2]	281~340	N/A	3
tone_para[x].cnt	281~340	N/A	1

The tone_conf[] define the indication tones when in the particular state.

size_array: This parameter indicates the size of the tone in 1 cycle.

tone_array[0]~[2]: This parameter indicates the dedicate tone which compose the final tones. The final tones is played in the sequence with 100ms interval. The range is from 0~28(internal tone) or 0xa1~0xa6 (user defined data on eeprom)

cnt: This parameter indicates the repeat number of the tones.

Notes: Ovc3860 chip had 29 internal tones on chip ROM which can be composed to specific tones. Among them, the No 1~7 tone is Do,Ra,Mi,Fa,So,La,Xi.

Notes: Tone index mapping to State Indication:

tone_conf index (tone_conf[i])	State Description
0	Power On
1	Power Off
2	Volumn Up
3	Volumn Down
4	Volumn Max
5	Volumn Min
6	Mute Mic
7	Unmute Mic
8	Pairing Timeout
9	Connected
10	Key Short Pressed
11	Key Long Pressed
12	Phone Call Ring
13	Low Volotage Warning
14	Mic Mute Indication with interval

ringtone

Key Name	Key Number	Default Value	Range(byte)
ringtone.tone_array[0]~[2]	341~343	N/A	3

ringtone.size_array	355	N/A	1
ringtone.cnt	356	N/A	1
ringtone.useLocal	357	0x01	1

The ringtone defines how's the indication tone when receive an incoming call.

tone_array[0]~[2]: This parameter indicates the dedicate tone which compose the final tones. The final tones is played in the sequence with 100ms interval. The range is from 0~28(internal tone) or 0xa1~0xa6 (user defined data on eeprom). See **tone_conf[0]~[11]** parameter to get more details.

size_array: This parameter indicates the size of the tone in 1 cycle.

cnt: This parameter indicates the repeat number of the tones.

useLocal: Set 1 to use the local tone. Set to 0, then not use the local tone, which will just play the outside ring-tone from the phone.

Note: In OVC3860 RevE firmware, the tone_array[3]~[13] are used for other purpose. See bellow.

ringtone(replaced purpose in RevE)

Key Name	Key Number	Default Value	Range(byte)
ringtone.tone_array[3]	344	0x00	1
Bit7:set 1 to use fixed tone volume. Other bits: set to be the fixed volume if Bit7 is set. For example, if set to0x88, then 0x80 means use fixed tone volumn, 0x08 means the tone vol			
ringtone.tone_array[4]	345	0x60	1
Bit3~0: PA on&off delay time (*10ms). If no external PA, please set to 0. Bit7~4: Internal Codec freq change delay(*100ma)			
ringtone.tone_array[5]	346	0x0e	1
Internal Codec from mute to unmute time delay*10ms, default 15			
ringtone.tone_array[6]	347	0x06	1

Open&Close internal codec delay n.			
ringtone.tone_array[7]	348	0x0a	1
set to be sbc decoder task waiting for codec closing timeout* 100 ms			
ringtone.tone_array[8]	349	0x20	1
set to be sbc decoder task waiting for next packet timeout* 10ms			
ringtone.tone_array[9]	350	0x09	1
set to be SBC_PLAY_ACL_BUF_DEPTH_HIGH			
ringtone.tone_array[10]	351	0x05	1
set to be SBC_PLAY_ACL_BUF_DEPTH			
ringtone.tone_array[11]	352	0x35	1
set to be sbc_cap.max_bitpool			
ringtone.tone_array[12],[13]	353,354	0xd6,0x08	1
Set to be ool_reg04,ool_reg05			

lvdtone

Key Name	Key Number	Default Value	Range(byte)
lvdtone.tone_array[0]~[3]	358~361	N/A	4
lvdtone.size_array	362	N/A	1
lvdtone.cnt	363	N/A	1
lvdtone.interval	364	N/A	1

The lvdtone defines how's the indication tone when in low voltage state.

tone_array[0]~[3]: This parameter indicates the dedicate tone which compose the final tones. The final tones is played in the sequence with 100ms interval. The range is from 0~28(internal tone) or 0xa1~0xa6 (user defined data on eeprom). See **tone_conf[0]~[11]** parameter to get more details.

size_array: This parameter indicates the size of the tone in 1 cycle.

cnt: This parameter indicates the repeat number of the tones.

Interval: This parameter sets low voltage indication interval, every Interval*10ms produce lvd indicaton when lvd interrupt produce.

mutetone

Key Name	Key Number	Default Value	Range(byte)
mutetone.tone_array[0]~[3]	365~368	N/A	4
mutetone.size_array	369	N/A	1
mutetone.cnt	370	N/A	1
mutetone.interval	371	N/A	1

The mutetone defines how's the indication tone when in Mic mute state.

tone_array[0]~[3]: This parameter indicates the dedicate tone which compose the final tones. The final tones is played in the sequence with 100ms interval. The range is from 0~28(internal tone) or 0xa1~0xa6 (user defined data on eeprom). See **tone_conf[0]~[11]** parameter to get more details.

size_array: This parameter indicates the size of the tone in 1 cycle.

cnt: This parameter indicates the repeat number of the tones.

Interval: This parameter sets mute tone indication interval, every Interval*10ms produce mute tone indicaton during mute operation.

app_btn_mask_bit

Key Name	Key Number	Default Value	Range(byte)
app_btn_mask_bit	372	0x04	1

You can disable the button behavior by setting app_btn_mask_bit.

Bit1: 1:can't not mute mic. 0:the button can mute mic.
Other: reserved.

app_to_pairing

Key Name	Key Number	Default Value	Range(byte)
app_to_pairing	373	0x1e	1

This parameter indicates how long(*10 seconds) will the product be discoverable if it enter pairing state. If configured to 0, it will always be discoverable if it enter pairing state until be connected or paired.

app_to_autooff

Key Name	Key Number	Default Value	Range(byte)
app_to_autooff	374	0x05	1

This parameter indicates how long(in minute) will the product automatically power off if it stay in idle or standby state. If configured to 0, it will disable the auto power off function.

app_to_autoconn

Key Name	Key Number	Default Value	Range(byte)
app_to_autoconn	375	0x0f	1

This parameter indicates how often(in second) will the product automatically reconnect to AG if it disconnect unexpectedly with AG. If configured to 0, it will disable the auto reconnect function.

app_to_sniff

Key Name	Key Number	Default Value	Range(byte)

app_to_sniff	376	0x20	1

This parameter indicates how often(in second) will the product automatically enter sniff mode.

app_vol_spk

Key Name	Key Number	Default Value	Range(byte)
app_vol_spk	377	0x08	1

This parameter indicates the initial speaker volume of the product when it be power on for the first time.
The speaker volume will change if press volume button and the updated volume value will be automatically saved

app_vol_mic

Key Name	Key Number	Default Value	Range(byte)
app_vol_mic	378	0x08	1

This parameter indicates the initial microphone volume of the product. The microphone volume will NOT change and keep the same value when power on.

isAutoConnect

Key Name	Key Number	Default Value	Range(byte)
isAutoConnect	379	0x00	1

This parameter indicates stereo chip will auto connect last stored paired device.

isAutoPair

Key Name	Key Number	Default Value	Range(byte)
isAutoPair	380	0x01	1

This parameter indicates stereo chip will auto enter pairing mode during idle state.

isAutoAnswer

Key Name	Key Number	Default Value	Range(byte)
isAutoAnswer	381	0x00	1

This parameter sets auto answer or not when call is incoming.

~~isP2MPSupport~~

Key Name	Key Number	Default Value	Range(byte)
isP2MPSupport	382	0x00	1

app_hf_feature

Key Name	Key Number	Default Value	Range(byte)
app_hf_feature	383	0x1c	1

To set SDP attribute. Not recommend to change.

app_av_feature

Key Name	Key Number	Default Value	Range(byte)
app_av_feature	384	0x01	1

To set SDP attribute. Not recommend to change.

app_avc_feature

Key Name	Key Number	Default Value	Range(byte)
app_avc_feature	385	0x01	1

To set SDP attribute. Not recommend to change.

sdp_max_attr_byte_cnt

Key Name	Key Number	Default Value	Range(byte)
sdp_max_attr_byte_cnt	386	0x0058	1

Set sdp max attribute byte count. Not recommend to change.

codec_para

Key Name	Key Number	Default Value	Range(byte)
codec_para.reg_r00~reg_r23	387~411		25

The parameters are to be the Codec initial value. Not recommend to change.

pcm_en

Key Name	Key Number	Default Value	Range(byte)
pcm_en	412	0x8020	2

This parameter sets pcm en control register.

pcm_reg

Key Name	Key Number	Default Value	Range(byte)
pcm_reg	413	0x073d	2

This parameter sets pcm physical register.

extint_ctrl

Key Name	Key Number	Default Value	Range(byte)
extint_ctrl	414	0x005555ff	4

This parameter sets external gpio interrupt count.

~~uart_flowctl~~

Key Name	Key Number	Default Value	Range(byte)
uart_flowctl	415	0x00	1

pincode

Key Name	Key Number	Default Value	Range(byte)
pincode	416	"0000"	8

Set the pincode.

localname

Key Name	Key Number	Default Value	Range(byte)
localname	417	N/A	16

dma_line_reg

Key Name	Key Number	Default Value	Range(byte)
dma_line_reg	418	0x20	1

This is to set the dma transfer size in sbc decoder. Not recommend to change.

opera_mem

Key Name	Key Number	Default Value	Range(byte)
opera_mem	419	0x85	1

The opera_mem is redefined in RevE firmware as beblow:
bit0: set bt2.1 ssp feature
bit1: set to be auto conn after timeout
bit2: set to led flash when autoconnection
bit3: set no adjust 44100 freq.
bit4: set old a2dp version
bit5: set old avctp version
bit6: set to be old a2dp start cmd
bit7: set to be PA on&off with delay

content0

Key Name	Key Number	Default Value	Range(byte)
content0	420	0x03f4	2

Set to be L2CAP_CFG_MTU_INCOMING

content1

Key Name	Key Number	Default Value	Range(byte)
content1	421	0x1600	2

Set to be PAGE_TIMEOUT_DEF

content2

Key Name	Key Number	Default Value	Range(byte)
content2	422	0x0012	2

Set to be PAGE_SCAN_WINDOW_DEF

content3

Key Name	Key Number	Default Value	Range(byte)
content3	423	0x0012	2

Set to be INQUIRY_SCAN_WINDOW_DEF

mem_addr0

Key Name	Key Number	Default Value	Range(byte)
mem_addr0	424	0x08000800	4

Set to be PAGE_SCAN_INTERVAL_DEF + ((INQUIRY_SCAN_INTERVAL_DEF)<<16)

mem_addr1

Key Name	Key Number	Default Value	Range(byte)
mem_addr1	425	0x00007d00	4

Set to be SUPERVISION_TO_DFT

mem_addr2

Key Name	Key Number	Default Value	Range(byte)
mem_addr2	426	0x0000000a	4

Set to be auto reconnection delay(*200ms)

mem_addr3

Key Name	Key Number	Default Value	Range(byte)
mem_addr3	427	0x51525251	4

Checksum.

sbc_eq_reg

Key Name	Key Number	Default Value	Range(byte)
sbc_eq_reg	428	0x0000	2

Set to be SBC eq reg.

~~pskeys_enable~~

Key Name	Key Number	Default Value	Range(byte)
pskeys_enable	429	0x01	1

reserved0[0]~[2]

Key Name	Key Number	Default Value	Range(byte)
reserved0[0]	430	0x00	1
reserved0[1]	431	0xff	1
reserved0[2]	432	0x06	1

reserved0[0]:
bit0:set spp service

bit1: set to be sco vol tone enable, default 0
bit2: set to print codec status
bit3: set to be sco tone mute
bit4: set to be eeprom read led on
bit5: set to no send prefer rate.(old style)
bit6: set to don't store vol, default 0
bit7: set to check sbc mute data with old style

reserved0[1]: save reconnection info

reserved0[2]:
bit0: set to old codec init style
bit1: set to play sbc no tones
bit2: set to send preferred rate when short pkt

reserved0[3]~[11]

Key Name	Key Number	Default Value	Range(byte)
reserved0[3]~[11]	434~441	N/A	8

reserved0[4],[5] alias STM0 and COUNT.

These parameters are used internal. Please don't change.

~~nvram_app_ready~~

Key Name	Key Number	Default Value	Range(byte)
nvram_app_ready	442	0xff	1

Others

The PSKeys from index 443~470 (keyTable[],last_device, etc) are used and changed by the application only. The user do not need to change it.

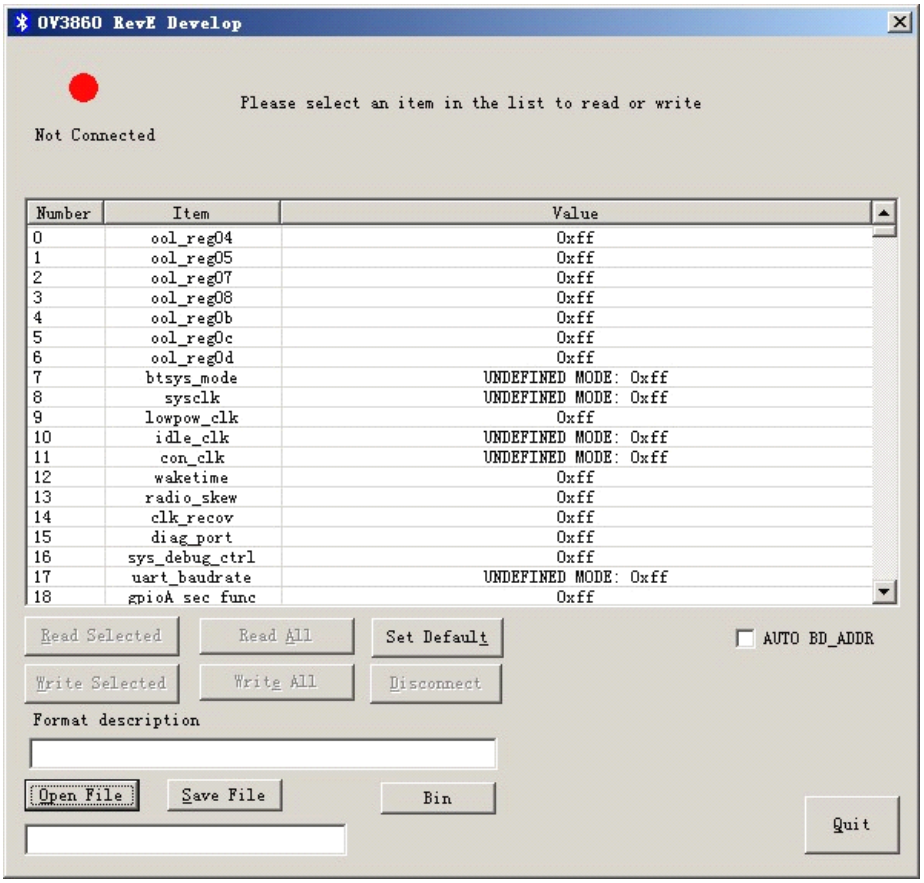
The PSKeys from index 471~534 are used to configure the Code Patch. Please directly contact the FAE for more information.

The PSKeys from index 535~546 are used to add the user-defined indication tones. Please directly contact the FAE for more information.

3.PSKeys Setting Tools

You can use our PSKeys setting tools to read&write the PSKeys:

1.Connect the OVC3860 Uart to windows PC by COM1 interface.
2.Open the RevE_Config.exe.



3.Power on or reset the OVC3860 chip.
4.The Application will then show the Connected State.

5.You can load the default config file which provided by FAE, and change it in need. Then write them all.

Note:
The default pc tools is for 8k-bits eeprom, which is enough for accommodating the PSKeys. But if you want to use user-defined tones or add code patch, we will provide the "larger eeprom" tools. Please contact our FAE for more informations.

Revision History

Rev 1.1:
Update to support OVC3860 RevE configuration

Rev 1.2:
Update to add chapter of “PSKeys Setting Tools”