

PC2070

Configuration of PD-controller TPS65987D, IC35.

Default configuration transmitted by CPU on I2C address 0x21.

Only the following registers are configured after reset.

(The flash, IC34, can be empty.)

Global System Configuration (0x27)		
Field	Value	Raw Value
PP Cable 1 Switch Config	PP Cable Switch as Output, Guaranteed 4.5-5.5V	0x1
PP 1 Switch Config	PP Switch as Source Only (Output)	0x1
PP 2 Switch Config	PP Switch as Source Only (Output)	0x1
PP 3 Switch Config	PP Switch Disabled	0x0
PP 4 Switch Config	PP Switch Disabled	0x0
87 Emulation Mode	☒	0x1
I2C1 Enable as Master	☐	0x0
I2C3 Enable as Master	☐	0x0
External Processor	Default	0x0
TBT Controller I2C Port	I2C1	0x1
I2C Timeout	1 S	0x7
SPI Read Only	☐	0x0

Reg 0x27: 0x7800000014140080000000090001

Port Configuration (0x28)		
Field	Value	Raw Value
Port Configuration	DFP	0x1
Receptacle Type	Standard USB2-only USB-C receptacle	0x0
Audio Accessory Support	☐	0x0
Debug Accessory Support	☐	0x0
Type-C Supported Options	No Options	0x0
VConn Supported	VCONN supported as DFP only (reject VCONN_Swap requests)	0x2
USB3.0/3.1 Rate	USB3 not supported	0x0
Set UVP to 4.5 V	☐	0x0
Under-voltage Protection Trip Point, PP_5V	20%	0x3
Under-voltage Protection Usage, PP_HV	20%	0x3
Over Voltage Protection Trip Point	24 V	0x3f
Over Voltage Protection Usage	Disconnect VBUS if voltage exceeds 15% of expected max.	0x3
High Voltage Warning Level	Warning when source VBUS voltage exceeds 20% from nominal	0x1
Low Voltage Warning Level	Warning when source VBUS Voltage dips below 20% from nominal	0x1
Soft Start Slew Rate	0.41 V/mS typical	0x0
Set UVP Debounce	☐	0x0
Programmable Voltage Threshold	0 V	0x0
Programmable Power Threshold	0 W	0x0

Reg 0x28: 0x1ffb61001

Port Control (0x29)

Field	Value	Raw Value
Type-C Current	3 A (strongest pullup) ▾	0x2
PD Mode	Normal PD Behavior ▾	0x0
Process Swap To Sink	☐	0x0
Initiate Swap To Sink	☐	0x0
Process Swap To Source	☐	0x0
Initiate Swap To Source	☐	0x0
Process VCONN Swap	☐	0x0
Process Swap to UFP	☐	0x0
Initiate Swap to UFP	☐	0x0
Process Swap to DFP	☐	0x0
Initiate Swap to DFP	☐	0x0
Automatic ID Request	☐	0x0
Force USB Generation 1	☐	0x0
Externally Powered	☐	0x0
Automatic Sink Cap	☐	0x0
Sink Control Bit	☐	0x0
15 kOhm Resistor Present	☐	0x0
Data Contact Detection Enable	☐	0x0
Charger Advertise Enable	Charger Advertise Disabled ▾	0x0
USB Disable	☐	0x0
Charger Detect Enable	Charger Detect Disabled ▾	0x0

Reg 0x29: 0x2

Transmit Source Capabilities (0x32)

Tx Source PDO Config

Field	Value	Raw Value
Active PDO Bank	Use Bank 0	0x0
Active PDO Bank Follows EP	☐	0x0

Bank 0 Settings

Number of Bank 0 Source PDOs

2

Source PDO 1

Field	Value	Raw Value
Switch Source	PP2 sources this PDO	0x1
Maximum Current	3 A	0x12c
Voltage	5 V	0x64
Peak Current	100%	0x0
Unchunked Extended Msg Supported	☒	0x1
USB Capable	☐	0x0
USB Suspend Supported	☐	0x0
Supply Type	Fixed Source	0x0

Source PDO 2

Field	Value	Raw Value
Advertised Mask	Always Advertise	0x1
Switch Source	PP1 sources this PDO	0x0
Maximum Current	1 A	0x64
Voltage	20 V	0x190
Peak Current	100%	0x0
Supply Type	Fixed Source	0x0

Bank 1 Settings

Number of Bank 1 Source PDOs

0

```
0x19000000000000000000000000000006412c0004b12c000640640101912c000000510000fc02
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Transmit Sink Capabilities (0x33)

Sink PDO Count

Field	Value	Raw Value
Number of Sink PDOs	0	0x0

Reg 0x33: 0x1900000

SW 2020-01-23 OK

Sleep Control Register (0x70)

Field	Value	Raw Value
Sleep Mode Allowed	☐	0x0
Delay 100 mS Before Sleep	☐	0x0
Delay 1000 mS Before Sleep	☐	0x0
Delay 30000 mS Before Sleep	☐	0x0
Sleep on 5V non-PD Load	☐	0x0

Reg 0x70: 0x0