POWER

LDO — +3.3VRTC → RTC   (3.3V@10mA)

DC_IN 5V 2A

DCDC Charger

Battery 1 cell 3.7V

DC-DC1 Step Down — +1.25V → Core   (1.25V@800mA)

LDO — +2.5V → CPU DAC/USB/SATA MODULE   (2.5V@100mA)

DC-DC2 Step Down — +3.3V → GPIO,NAND,LCD...   (3.3V@600mA)

DC-DC3 Step Down — +1.8V → DDRII&Codec   (1.8V@800mA)

DC-DC6 Step Down — RT8015 3.3V → 3G MODULE   (MAX 1.1A)

VCCx2_EN

DC-DC4 Step Up — VCC5V → USB,HDMI   (5V@100mA)

VCCx3_EN

DC-DC5 Step Up — → VGH,VGL,AVDD   (AVDD:9.5V@17.872mA)

DC-DC6 Step Up — LED+ → Backlight   (10V@120mA)

PWR_EN

DDRII
2 PCS 64Mx16bit

NAND & NOR
SPI Nor For Boot
2PCS NAND with
TSOP-48

DDRII Controller
Support up to 128Mx32bit DDRII
DQ0-DQ31,A0-A13,BA0-BA2,WEN,CKE
CK/CKN,CSN,RASN,CASN,UDM_A,LDM_A,
ODT,LDQS_A/LDQSN_A,UDQS_A/UDQSN_A,
UDM_B,LDM_B,LDQS_B/LDQSN_B,
UDQS_B/UDQSN_B

NAND Controller
Support general NAND &
I-nand(SDIO)
IO_0-IO_7,RB0,RB1,CE0,
CE1,REN_WR,WEN_CLK,
CLE,ALE.SPI NOR Flash
Interface.

RGB Interface
24bit RGB
R0-R7,G0-G7,B0-B7,

TCON
VCOM,CPH1,OEV1,CPV1
OEH,STV1,STH1,BL&
LED_CS

Codec
HS_LEFT&HS_RIGHT
LINE_LEFT&LINE_RIGHT

CVBS & YPbPr
VDAC_R,VDAC_G,VDAC_B
(Up to 1080p). CVBS

HDMI Interface
HPD,SDA,SCL,CEC
TX_CKN/TX_CKP,TX_0N/TX_0P,
TX_1N/TX_1P,TX_2N/TX_2P

SDIO Interface
SD_A(For SD/MMC/TF Card)

GPIO

RMII&ITU601 &FEC_B
1、RMII Interface
2、ITU601 Interface
3、8bit FEC_B Interface
4、GPIOD_12-23

JTAG&I2S

GP_INPUT
3 GP_Input

POWER
core:1.28V
DDRII:1.8V
GPIO:3.3V

USB_A
OTG
VBUS,ID,DP,DM,TXTTUNE

USB_B
HOST
VBUS,DP,DM,TXTTUNE

UART & I2C
UART_A,I2C_A
UART_B,I2C_B

IRU601/RMII/FEC_A
8bit FEC&8bit ITU601&
RMII Interface&GPIOC_0-12
(Can be used for interrupt)

SDIO & ISO7816
ISO7816 Interface
SDIO(can be used for wifi)

SATA Controller
RXM/RXP,TXM/TXP,SATA_REXT

Demod

ADC
6 channel
CH0-CH3:for Touch
CH4:for ADC_KEY

AML8726-M
BGA

IR Remote

OSC 24MHz

RTC 32.768KHz

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test point resevered

HDMI JACK

TF CARD

Extended GPIO Application

GPIO MOTOR etc.

Codec

8bitx3 → LCD 7' CPT 800X600
DE,CLK

OTG

3G MODULE

UART-Bluetooth
Linux Debug
G Sensor
Magnetic Sensor
CAP/RES TOUCH

CAMERA

SDIO WIFI/BT

ADC_KEY
VBAT_DET
Option for
RES touch

IR   24MHz   32.768KHz

1、DDRII can be used 2 PCS 64Mx16bit,2 PCS 128Mx16bit,4 PCS 128Mx8bit,8 PCS 256Mx4bit.Recommand 2 PCS 64Mx16bit.

2、Many NAND types are available(TSOP-48 or LGA52 package). You can use two NANDs
(4 CE total) and 1 PCS I-NAND (SDIO interface).This board only reversed for TSOP,If you need,you can add other type package.

3、USB 2.0. USB_A is a OTG type. USB_B is USB_Host only.

PTT-726A

Title: 01.BLOCK DIAGRAM

Size: Custom
Document Number: M55-V961-113
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