

NT_MB_MX6 Hardware Spec

NT_MB_MX6 is a low cost, highly integrated system based on i.mx6 Single/Dual/Quad-Core CPU (Cortex-A9, up to 1.2G). NT_MB_MX6 has a wide variety of peripheral options including FlexCAN、SATA-2, , multiple display channels, and LVDS, Ethernet, HDMI v1.4 , VGA, 2x5W Amplifier, Mic, HeadPhone,TV input, mini PCIE,2xUSB Host, 1xUSB OTG. The NT_MB_MX6 is ideal for customers looking for rapid product while maintaining the flexibility of a custom design.

Highlights of the NT_MB_MX6:

- | Support 4GB/8GB/16GB NAND and INAND or 32GB Micro SD as primary Storage
- | Support 1GB/2GB DDR3
- | Support 2 x USB 2.0 Host, 1 x USB OTG .
- | Support RMII 100M Ethernet, Support 2 Ethernet PHY.
- | Support VGA800x600(or NTSC, PAL), HDMI1080P, Dual LVDS 。 Android could support 4 display
- | Support 1x HeadPhone (1.02 kHz sine into 16 Ω load at 3.3 V), 1 x MIC , Could Drive 2*5W Amplifier
- | Support 3 Cameras (NTSC or PAL) , or 1 x YpbPr, Support USB UVC Camera
- | Support SDIO WiFi,USB WIFI Dongle.
- | Support EVDO, WCDMA, TD-SCDMA, 1 x MiniPCIE interface. Support LTE.
- | Support USB Bluetooth, Support Bluetooth4.0
- | 1xUART , 1x I2C, Support capacitive touch screen and resistive touch screen 。
- | 12V 2A/or 5V 4A Power Supply。

Media Support

1. Android Native Codecs

File Extension	Video Decoders	Audio Decoders
.mid/.xmf/.mxmf, .rtttl/.rtx, .ota .imy	-	MIDI Type 0 and 1. DLS Version 1 and 2. XMF and Mobile XMF. Support for ringtone formats RTTTL/RTX, OTA, and iMelody.
.ogg		Vorbis

2. Android Native Image

文件扩展名	Encoder	Decoder	Details
.jpg	*	*	Base+progressive

.gif		*	
.png	*	*	
.bmp	*	*	

3. Freescale Enhanced Codecs

File Extension	Demuxers	Video Decoders	Audio Decoders
.mp3			MP3
.aac/.adts			AAC LC/PLUS
.wav			LPCM
.amr/.awb			AMR-NB/AMR-WB
.mp4 .mov .f4v	MP4	MPEG4 SP/ASP except GMC H.264 BP/MP/HP H263 MJPEG	AAC LC/PLUS MP3
.m4a	MP4		AAC LC/PLUS
.3gp	MP4	MPEG4 SP/ASP except GMC H.264 BP/MP/HP H263	AAC LC/PLUS AMR-NB AMR-WB
.avi	AVI	MPEG4 SP/ASP except GMC Xvid H.264 BP/MP/HP H263 MJPEG	AAC LC/PLUS MP3 LPCM
.wma	ASF		WMA STD, PRO, Lossless
.wmv/.asf	ASF	VC-1 SP/MP/AP WMV 7/8	WMA STD, PRO, Lossless
.mkv/mka	MKV	H.264 BP/MP/HP MPEG4 SP/ASP except GMC Xvid VC-1 SP/MP/AP	AAC MP3 WMA STD, PRO, Lossless Vorbis
.flv/.f4v	FLV	Sorenson H263 H.264 BP/MP/HP	MP3 AAC
.mpg .vob .ts	MPEG2/PS	MPEG2 BP/MP	MP3 AAC LPCM
	MPEG2/TS	MPEG2 BP/MP H.264 BP/MP/HP	

.webm	MKV	VP8	MP3 AAC LC/PLUS
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Interface:

CN2 Amplifier left out

CN3 Amplifier right out

J1402 Headphone out

J1404 MIC Input

J23 Micro SD

J500 TV signal input, support NTSC, PAL, YpbPr

J18 UART1 (default as debug port)

Pin #	Pin Name	Pin Type	Pin Description
1	5V	Power	5V Power Supply
2	UART1_TXD	Output	Send
3	UART1_RXD	Input	Receive
4	GND	Gnd	

J7, I2C interface.

Pin #	Pin Name	Pin Type	Pin Description
1	3P3V	Power	3.3V Power Supply
2	GPIO2_IO11	GPIO	Reset Pin
3	PEN_IRQ	Input	Interrupt Pin
4	I2C3_SCL	I2C SCL	I2C Clock
5	I2C3_SDA	I2C SDA	I2C Data
6	GND	Gnd	

J22 SATA interface.

J16, Mini PCIE support 3G, 4G module.

CON7 SIM card slot

J8 USB HOST

J12 CAN interface

J21 Camera 24PIN.

Pin #	Pin Name	Pin Type	Pin Description
1	CSI0_DAT4	Camera Data Input	Can act as GPIO
2	CSI0_DAT5	Camera Data Input	Can act as GPIO
3	CSI0_DAT6	Camera Data Input	Can act as GPIO
4	CSI0_DAT7	Camera Data Input	Can act as GPIO
5	CSI0_DAT8	Camera Data Input	Can act as GPIO
6	CSI0_DAT9	Camera Data Input	Can act as GPIO

7	CSI0_DAT10	Camera Data Input	Can act as GPIO
8	CSI0_DAT11	Camera Data Input	Can act as GPIO
9	3P3V	Power	3.3V Power Supply
10	I2C3_SCL	I2C SCL	I2C Clock
11	I2C3_SDA	I2C SDA	I2C Data
12	GND	Gnd	
13	CSI0_VSYNC	Camera Vsync Input	
14	CSI0_HSYNC	Camera Hsync Input	
15	CSI0_DAT19	Camera Data Input	
16	CSI0_DAT18	Camera Data Input	
17	CSI0_DAT17	Camera Data Input	
18	CSI0_DAT16	Camera Data Input	
19	CSI0_DAT15	Camera Data Input	
20	CSI0_DAT14	Camera Data Input	
21	CSI0_PIXCLK	Camera Data Input	
22	CSI0_DAT13	Camera Data Input	
23	CSI0_DAT12	Camera Data Input	
24	GND	Gnd	

Size:

200mm* 135.5mm

Mother Board:



CoreBoard (DualLite)



NineTongCheng Ltd. ShenZhen, China.
Contact: Mr. Yin , Syype : chuanyanyin

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