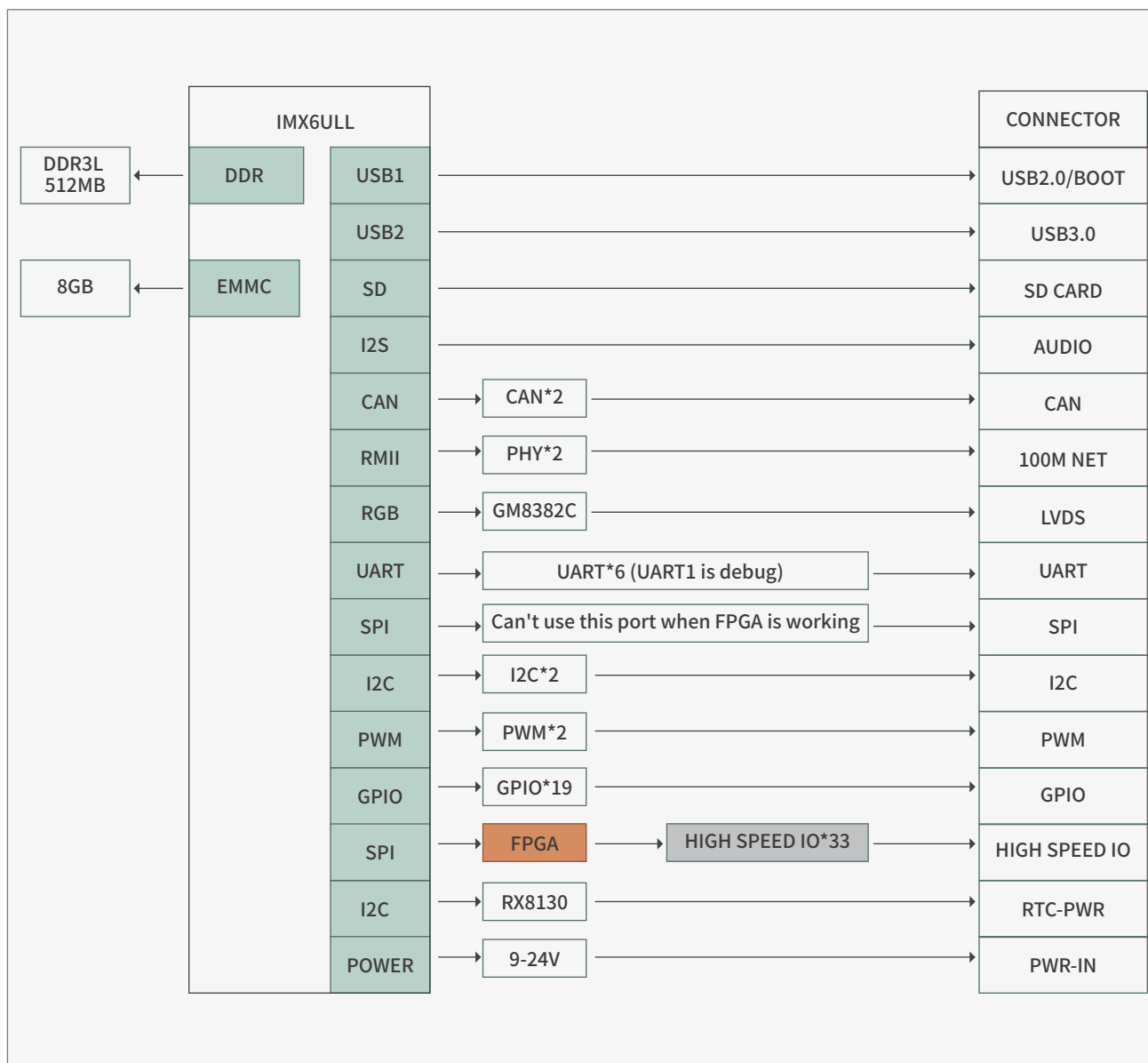研智科技
YANZHI TECHNOLOGY

WEC-SMX6UL

FEATURE：

◐ Belong to the "Sprite" series core-board, featuring excellent compatibility and being compatible with other core boards of the Sprite series

◐ NXP i. MX 6ULL，ARM Cortex-A7

◐ DDR3L memory，512 MB. eMMC、SD storage

◐ 2×FE, 10/100Mbps

◐ 2×USB 2.0, 6×UART, 2×CAN, 19× GPIO

◐ 33 high-speed I/Os, provided by the integrated FPGA

SPECIFICATION

Product Model	Product Model	WEC-SMX6UL
CPU	CPU Model	NXP i.MX 6ULL，MCIMX6Y2CVM08AB
	Core	ARM Cortex-A7
	Frequency	800MHz
	LLC	L2 Cache 128 KB
	CPU TDP	4W
Memory	Type	DDR3L，Onboard Memory
	Max Capacity	512 MB
Storage	eMMC	4/8 GB
	SD Card	1× SD card slot
Display	LVDS	1× single-channel 4-wire 18/24-bit LVDS, Resolution：1366×768
Ethernet	LAN	2，10/100/1000 Mbps，RTL8201F
I/O Interface	USB	2×USB 2.0
	UART	6
	CAN	2
	GPIO	19
	High-speed IO	33，provided by the integrated FPGA
	SPI	1
	PWM	2
	I2C	1
	I2S	1
	SD	1
Operating System	OS	Linux
Power Supply	Type	DC
	Input Voltage	9-24 V
Environment	Operating Temp.	Common grade：-10～60℃，Industrial grade：-40～85℃
	Storage Temp.	-40～85℃
	Operating Humi.	10- 90% @ 40℃，non-condensing
	Storage Humi.	0- 95% @ 60℃，non-condensing
Dimension	Outside Dime.	82mm×58mm

![研智科技 YANZHI TECHNOLOGY]

BLOCK DIAGRAM

IMX6ULL			CONNECTOR
DDR3L 512MB ←	DDR	USB1 →	USB2.0/BOOT
		USB2 →	USB3.0
8GB ←	EMMC	SD →	SD CARD
		I2S →	AUDIO
		CAN → CAN*2 →	CAN
		RMII → PHY*2 →	100M NET
		RGB → GM8382C →	LVDS
		UART → UART*6 (UART1 is debug) →	UART
		SPI → Can't use this port when FPGA is working →	SPI
		I2C → I2C*2 →	I2C
		PWM → PWM*2 →	PWM
		GPIO → GPIO*19 →	GPIO
		SPI → FPGA → HIGH SPEED IO*33 →	HIGH SPEED IO
		I2C → RX8130 →	RTC-PWR
		POWER → 9-24V →	PWR-IN

ORDER INFORMATION

产品型号	CPU	内存	存储	显示	以太网	UART	CAN	高速IO	GPIO	工作温度
WEC-SMX6ULL	i.MX 6ULL	512MB	4/8G	LVDS	2	6	2	33	19	-20 ~ 60 ℃
WEC-SMX6ULL	i.MX 6ULL	512MB	4/8G	LVDS	2	6	2	33	19	-40 ~ 85 ℃