

## BB3+ CM5 STM32H7R7 pinout

Pin Nb	PINs	FUNCTIONs	LABELs	NOTE
A2	PE0	GPIO_EXTI0	SYSMCU_IRQ	
A3	PF3	GPIO_EXTI3	DIB3_IRQ	
A4	PF2	GPIO_EXTI2	DIB2_IRQ	
A5	PG3	GPIO_Output	WDG_OUT	
A7	PM12	USB_OTG_FS_DM		
A9	PM6	USB_OTG_HS_DP		
A10	PM3	GPIO_Output	DIB3_CSA	
A12	PD3	LTDC_B1		
A13	PE14	SPI4_MOSI	DIB2/DIB5_MOSI	
A14	PD2	SDMMC1_CMD		
B1	PB8	SDMMC1_D4		
B2	PE2	SPI4_SCK	DIB2/DIB5_SCK	
B3	PB5	LTDC_R2		
B4	PF4	GPIO_EXTI4	DIB4_IRQ	
B5	PF0	I2C2_SDA	SDA	
B6	PD7	ETH_RMII_REF_CLK		
B7	PM11	USB_OTG_FS_DP		
B8	PM9*	USB_OTG_HS_ID		
B9	PM5	USB_OTG_HS_DM		
B10	PM2	GPIO_Input	DIN2	
B11	PG0	LTDC_R7		
B12	PE13	SPI4_MISO	DIB2/DIB5_MISO	
B13	PD1	UART4_TX	RS485_TX/DOUT3	
B14	PC10	SDMMC1_D2		
B15	PC11	SDMMC1_D3		
C2	PB9	SDMMC1_D5		
C4	PB3(JTDO/TRACESWO)	LTDC_R4		
C5	PF1	I2C2_SCL	SCL	
C6	PG2	LTDC_HSYNC		
C7	PM13	SPI5_MOSI	DIB4_MOSI	
C8	PM14	SPI5_MISO	DIB4_MISO	
C9	PM8*	USB_OTG_HS_VBUS		
C12	PE11	LTDC_VSYNC		
C13	PD0	UART4_RX	RS485_RX/DIN3	
C14	PA12	SPI2_SCK	DIB1/DIB3_SCK	
C15	PA11	LTDC_B3		
D2	PC14-OSC32_IN(OSC32_IN)	RCC_OSC32_IN		
D4	PB7	ETH_RMII_TXD1		
D5	PB4(NJTRST)	SPI2_NSS	DIB1_CSA	
D7	PD5	GPIO_EXTI5	DIB5_IRQ	
D11	PE15	GPIO_Output	LCD_ON	
D12	PC12	SDMMC1_CK		
D13	PA14(JTCK/SWCLK)	DEBUG_JTCK-SWCLK	SWCLK	
D14	PA9	LTDC_B5		
D15	PC8	SDMMC1_D0		
E1	PE6	GPIO_Output	DIB5_CSA	
E2	PE4	SPI4_NSS	DIB2_CSA	
E5	PB6	CEC	DVID_CEC	
E7	PD6	ETH_CLK		
E10	PG1	LTDC_R6		
E11	PE12	GPIO_EXTI12	DVID_HPA	
E12	PA13(JTMS/SWDIO)	DEBUG_JTMS-SWDIO	SWDIO	
E13	PA10	LTDC_B4		
E14	PC9	SDMMC1_D1		
E15	PC6	SDMMC1_D6		
F1	PG14	GPIO_Output	SYSMCU_CS	
F2	PG12	LTDC_G1		
F3	PG11	ETH_RMII_TX_EN		
F12	PA8	LTDC_B6		
F13	PC7	SDMMC1_D7		
F14	PN1	XSPIM_P2_NCS1		

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G5	PG13	ETH_RMII_TXD0	
G11	PA15(JTDI)	LTDC_R5	
G13	PN3	XSPIM_P2_IO1	
G14	PN0	XSPIM_P2_DQS0	
G15	PN11	XSPIM_P2_IO7	
H4	PF7	UART7_TX	UART_TX/DOUT1
H5	PF6	SPI5_NSS	DIB4_CSA
H13	PN10	XSPIM_P2_IO6	
H14	PN9	XSPIM_P2_IO5	
H15	PN2	XSPIM_P2_IO0	
J2	PF9	LTDC_R0	
J3	PF10	LTDC_R1	
J14	PN6	XSPIM_P2_CLK	
K1	PH0-OSC_IN(PH0)	RCC_OSC_IN	
K2	PH1-OSC_OUT(PH1)	RCC_OSC_OUT	
K13	PN8	XSPIM_P2_IO4	
K14	PN4	XSPIM_P2_IO2	
K15	PN5	XSPIM_P2_IO3	
L1	PC1	ETH_MDC	
L2	PC2	SPI2_MISO	DIB1/DIB3_MISO
L3	PC3	SPI2_MOSI	DIB1/DIB3_MOSI
L4	PA2	ETH_MDIO	
L5	PC4	ETH_RMII_RXD0	
L12	PB12	LTDC_G5	
M1	PA0	LTDC_G3	
M2	PA1	LTDC_G2	
M3	PA4	LTDC_R3	
M4	PA7	ETH_RMII_CRS_DV	
M5	PF11	LTDC_B0	
M6	PE7	UART7_RX	UART_RX/DIN1
M11	PO3	XSPIM_P1_DQS1	
M12	PP10	XSPIM_P1_IO10	
M13	PB14	UART4_DE	RS485_TX_EN/DOUT2
M14	PB15	LTDC_G7	
N1	PA3	LTDC_DE	
N2	PA5	LTDC_CLK	
N3	PC5	ETH_RMII_RXD1	
N4	PB2	LTDC_B2	
N5	PF15	SPI5_SCK	DIB4_SCK
N6	PP12	XSPIM_P1_IO12	
N7	PP14	XSPIM_P1_IO14	
N9	PP2	XSPIM_P1_IO2	
N10	PP5	XSPIM_P1_IO5	
N11	PO2	XSPIM_P1_DQS0	
N12	PP1	XSPIM_P1_IO1	
N14	PB11	LTDC_G6	
N15	PB13	LTDC_G4	
P1	PA6	LTDC_B7	
P2	PB0	GPIO_Output	DVID_SEL1
P3	PF13	GPIO_Output	DVID_SEL2
P4	PF14	LTDC_G0	
P6	PP11	XSPIM_P1_IO11	
P8	PP15	XSPIM_P1_IO15	
P9	PP3	XSPIM_P1_IO3	
P11	PP0	XSPIM_P1_IO0	
P12	PP7	XSPIM_P1_IO7	
P13	PP8	XSPIM_P1_IO8	
P15	PB10	ETH_MII_RX_ER	
R2	PB1	GPIO_EXTI1	DIB1_IRQ
R4	PE8	GPIO_EXTI8	TFT_IRQ
R5	PE10	GPIO_Output	LED_nACT
R7	PP13	XSPIM_P1_IO13	

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R8	PP4	XSPIM_P1_IO4
R10	PO4	XSPIM_P1_CLK
R11	PP6	XSPIM_P1_IO6
R13	PO0	XSPIM_P1_NCS1
R14	PP9	XSPIM_P1_IO9