

HPS Function	HPS Pin Mux Select 8	HPS Pin Mux Select 7	HPS Pin Mux Select 6	HPS Pin Mux Select 5	HPS Pin Mux Select 4	HPS Pin Mux Select 3	HPS Pin Mux Select 2	HPS Pin Mux Select 1	HPS Pin Mux Select 0	HPS_OSC_CLK Register Value (1)
HPS IOA_1	GPIO0_I00	SPIM0_SS1_N	SPI0_CLK	UART0_CTS_N		NAND_ADO0	Trace_D10	USB0_CLK	SDMMC_CCLK	HPS_OSC_CLK
HPS IOA_2	GPIO0_I01	SPIM1_SS1_N	SPI0_MOSI	UART0_RTS_N		NAND_ADO1	Trace_D09	USB0_STP	SDMMC_CMD	HPS_OSC_CLK
HPS IOA_3	GPIO0_I02		SPI0_SS0_N	UART0_TX	I2C1_SDA	NAND_WE_N	Trace_D08	USB0_DIR	SDMMC_DATA0	HPS_OSC_CLK
HPS IOA_4	GPIO0_I03		SPI0_MISO	UART0_RX	I2C1_SCL	NAND_RE_N	Trace_D07	USB0_DATA0	SDMMC_DATA1	HPS_OSC_CLK
HPS IOA_5	GPIO0_I04	SPIM0_CLK		UART1_CTS_N	I2C0_SDA	NAND_WP_N	Trace_D06	USB0_DATA1	SDMMC_DATA2	HPS_OSC_CLK
HPS IOA_6	GPIO0_I05	SPIM0_MOSI		UART1_RTS_N	I2C0_SCL	NAND_RE_N	Trace_D05	USB0_NXT	SDMMC_DATA3	HPS_OSC_CLK
HPS IOA_7	GPIO0_I06	SPIM0_MISO	MDIO2_MDIO	UART1_TX	I2C_EMAC2_SDA	NAND_ADO3	Trace_D04	USB0_DATA2	SDMMC_DATA4	HPS_OSC_CLK
HPS IOA_8	GPIO0_I07	SPIM0_SS0_N	MDIO2_MDC	UART1_RX	I2C_EMAC2_SCL	NAND_CLE	Trace_D15	USB0_DATA3	SDMMC_DATA5	HPS_OSC_CLK
HPS IOA_9	GPIO0_I08	SPIM1_CLK	SPI1_CLK	MDIO1_MDIO	I2C_EMAC1_SDA	NAND_ADO4	Trace_D14	USB0_DATA4	SDMMC_DATA6	HPS_OSC_CLK
HPS IOA_10	GPIO0_I09	SPIM1_MOSI	SPI1_MOSI	MDIO1_MDC	I2C_EMAC1_SCL	NAND_ADO5	Trace_D13	USB0_DATA5	SDMMC_DATA7	HPS_OSC_CLK
HPS IOA_11	GPIO0_I010	SPIM1_MISO	SPI1_SS0_N	MDIO0_MDIO	I2C_EMAC0_SDA	NAND_ADO6	Trace_D12	USB0_DATA6	SDMMC_PWR_EN	HPS_OSC_CLK
HPS IOA_12	GPIO0_I011	SPIM1_SS0_N	SPI1_MISO	MDIO0_MDC	I2C_EMAC0_SCL	NAND_ADO7	Trace_D11	USB0_DATA7		HPS_OSC_CLK
HPS IOA_13	GPIO0_I012					NAND_ALE	Trace_D10	USB1_CLK	EMAC0_TX_CLK	HPS_OSC_CLK
HPS IOA_14	GPIO0_I013					NAND_RB	Trace_D09	USB1_STP	EMAC0_TX_CTL	HPS_OSC_CLK
HPS IOA_15	GPIO0_I014					NAND_CE_N	Trace_D08	USB1_DIR	EMAC0_RX_CLK	HPS_OSC_CLK
HPS IOA_16	GPIO0_I015						Trace_D07	USB1_DATA0	EMAC0_RX_CTL	HPS_OSC_CLK
HPS IOA_17	GPIO0_I016					NAND_ADO8	Trace_D06	USB1_DATA1	EMAC0_TXD0	HPS_OSC_CLK
HPS IOA_18	GPIO0_I017					NAND_ADO9	Trace_D05	USB1_NXT	EMAC0_TXD1	HPS_OSC_CLK
HPS IOA_19	GPIO0_I018					NAND_ADO10	Trace_D04	USB1_DATA2	EMAC0_RXD0	HPS_OSC_CLK
HPS IOA_20	GPIO0_I019	SPIM1_SS1_N				NAND_ADO11	Trace_CLK	USB1_DATA3	EMAC0_RXD1	HPS_OSC_CLK
HPS IOA_21	GPIO0_I020	SPIM1_CLK	SPI0_CLK	UART0_CTS_N	I2C1_SDA	NAND_ADO12	Trace_D00	USB1_DATA4	EMAC0_TXD2	HPS_OSC_CLK
HPS IOA_22	GPIO0_I021	SPIM1_MOSI	SPI0_MOSI	UART0_RTS_N	I2C1_SCL	NAND_ADO13	Trace_D01	USB1_DATA5	EMAC0_TXD3	HPS_OSC_CLK
HPS IOA_23	GPIO0_I022	SPIM1_MISO	SPI0_SS0_N	UART0_TX	I2C0_SDA	NAND_ADO14	Trace_D02	USB1_DATA6	EMAC0_RXD2	HPS_OSC_CLK
HPS IOA_24	GPIO0_I023	SPIM1_SS0_N	SPI0_MISO	UART0_RX	I2C0_SCL	NAND_ADO15	Trace_D03	USB1_DATA7	EMAC0_RXD3	HPS_OSC_CLK
HPS IOB_1	GPIO1_I00	SPIM1_CLK		UART0_CTS_N		NAND_ADO0	Trace_D10		EMAC1_TX_CLK	HPS_OSC_CLK
HPS IOB_2	GPIO1_I01	SPIM1_MOSI		UART0_RTS_N		NAND_ADO1	Trace_D09		EMAC1_TX_CTL	HPS_OSC_CLK
HPS IOB_3	GPIO1_I02	SPIM1_MISO		UART0_TX	I2C0_SDA	NAND_WE_N	Trace_D08		EMAC1_RX_CLK	HPS_OSC_CLK
HPS IOB_4	GPIO1_I03	SPIM1_SS0_N		UART0_RX	I2C0_SCL	NAND_RE_N	Trace_D07		EMAC1_RX_CTL	HPS_OSC_CLK
HPS IOB_5	GPIO1_I04	SPIM1_SS1_N		UART1_CTS_N		NAND_WP_N	Trace_D06		EMAC1_TXD0	HPS_OSC_CLK
HPS IOB_6	GPIO1_I05		SPI1_MOSI	UART1_RTS_N		NAND_ADO2	Trace_D05		EMAC1_TXD1	HPS_OSC_CLK
HPS IOB_7	GPIO1_I06		SPI1_SS0_N	UART1_TX	I2C1_SDA	NAND_ADO3	Trace_D04		EMAC1_RXD0	HPS_OSC_CLK
HPS IOB_8	GPIO1_I07		SPI1_MISO	UART1_RX	I2C1_SCL	NAND_CLE	Trace_D15		EMAC1_RXD1	HPS_OSC_CLK
HPS IOB_9	GPIO1_I08	JTAG_TCK	SPI0_CLK	MDIO2_MDIO	I2C_EMAC2_SDA	NAND_ADO4	Trace_D14		EMAC1_TXD2	HPS_OSC_CLK
HPS IOB_10	GPIO1_I09	JTAG_TMS	SPI0_MOSI	MDIO2_MDC	I2C_EMAC2_SCL	NAND_ADO5	Trace_D13		EMAC1_TXD3	HPS_OSC_CLK
HPS IOB_11	GPIO1_I010	JTAG_TDO	SPI0_SS0_N	MDIO0_MDIO	I2C_EMAC0_SDA	NAND_ADO6	Trace_D12		EMAC1_RXD2	HPS_OSC_CLK
HPS IOB_12	GPIO1_I011	JTAG_TDI	SPI0_MISO	MDIO0_MDC	I2C_EMAC0_SCL	NAND_ADO7	Trace_D11		EMAC1_RXD3	HPS_OSC_CLK
HPS IOB_13	GPIO1_I012				I2C1_SDA	NAND_ALE	Trace_D10	SDMMC_DATA0	EMAC2_TX_CLK	HPS_OSC_CLK
HPS IOB_14	GPIO1_I013				I2C1_SCL	NAND_RB	Trace_D09	SDMMC_CMD	EMAC2_TX_CTL	HPS_OSC_CLK
HPS IOB_15	GPIO1_I014			UART1_TX		NAND_CE_N	Trace_D08	SDMMC_CCLK	EMAC2_RX_CTL	HPS_OSC_CLK
HPS IOB_16	GPIO1_I015			UART1_RX			Trace_D07	SDMMC_DATA1	EMAC2_RX_CTL	HPS_OSC_CLK
HPS IOB_17	GPIO1_I016			UART1_CTS_N		NAND_ADO8	Trace_D06	SDMMC_DATA2	EMAC2_TXD0	HPS_OSC_CLK
HPS IOB_18	GPIO1_I017	SPIM0_SS1_N		UART1_RTS_N		NAND_ADO9	Trace_D05	SDMMC_DATA3	EMAC2_TXD1	HPS_OSC_CLK
HPS IOB_19	GPIO1_I018	SPIM0_MISO	MDIO1_MDIO		I2C_EMAC1_SDA	NAND_ADO10	Trace_D04	SDMMC_DATA4	EMAC2_RXD0	HPS_OSC_CLK
HPS IOB_20	GPIO1_I019	SPIM0_SS0_N	MDIO1_MDC		I2C_EMAC1_SCL	NAND_ADO11	Trace_CLK	SDMMC_DATA5	EMAC2_RXD1	HPS_OSC_CLK
HPS IOB_21	GPIO1_I020	SPIM0_CLK	SPI1_CLK		I2C_EMAC2_SDA	NAND_ADO12	Trace_D00	SDMMC_DATA6	EMAC2_TXD2	HPS_OSC_CLK
HPS IOB_22	GPIO1_I021	SPIM0_MOSI	SPI1_MOSI		I2C_EMAC2_SCL	NAND_ADO13	Trace_D01	SDMMC_DATA7	EMAC2_TXD3	HPS_OSC_CLK
HPS IOB_23	GPIO1_I022	SPIM0_MISO	SPI1_SS0_N	MDIO0_MDIO	I2C_EMAC0_SDA	NAND_ADO14	Trace_D02	SDMMC_PWR_EN	EMAC2_RXD2	HPS_OSC_CLK
HPS IOB_24	GPIO1_I023	SPIM0_SS0_N	SPI1_MISO	MDIO0_MDC	I2C_EMAC0_SCL	NAND_ADO15	Trace_D03		EMAC2_RXD3	HPS_OSC_CLK

Note:

(1) The HPS clock source must be assigned to either one of the 48 I/Os. The hps_osc_clk register selects which dedicated I/Os are used for the HPS clock input.

Date	Version	Changes Made
April 2017	2017.04.21	Initial release.
October 2017	2017.10.09	Updated the HPS Function pin names.
May 2019	2019.05.08	Removed PLL_CLK0/1/2/3 in the HPS Pin Mux Select 6 column.