36.4.374 Pad Control Register (IOMUXC_SW_PAD_CTL_PAD_KEY_COL4)

Address: 20E_0000h base + 5E8h offset = 20E_05E8h

Bit	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
R	0															HYS
W																
Reset	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
R	PUS		PUE	PKE	ODE	0			SPEED		DSE			0		SRE
W																
Reset	1	0	1	1	0	0	0	0	1	0	1	1	0	0	0	0

IOMUXC_SW_PAD_CTL_PAD_KEY_COL4 field descriptions

Field	Description
31–17 Reserved	This read-only field is reserved and always has the value 0.
16 HYS	Hysteresis Enable Field Select one of next values for pad: KEY_COL4. 0 **DISABLED** — CMOS input 1 **ENABLED** — Schmitt trigger input
15–14 PUS	Pull Up / Down Config. Field Select one of next values for pad: KEY_COL4. 00 **100K_OHM_PD** — 100K Ohm Pull Down 01 **47K_OHM_PU** — 47K Ohm Pull Up 10 **100K_OHM_PU** — 100K Ohm Pull Up 11 **22K_OHM_PU** — 22K Ohm Pull Up
13 PUE	Pull / Keep Select Field Select one of next values for pad: KEY_COL4. 0 **KEEP** — Keeper Enabled 1 **PULL** — Pull Enabled
12 PKE	Pull / Keep Enable Field Select one of next values for pad: KEY_COL4. 0 **DISABLED** — Pull/Keeper Disabled 1 **ENABLED** — Pull/Keeper Enabled
11 ODE	Open Drain Enable Field Enables open drain of the pin. 0 **DISABLED** — Output is CMOS. 1 **ENABLED** — Output is Open Drain.

Keep = letzten Input/Output-Wert halten, wenn Leitung hochohmig wird (für Busse)

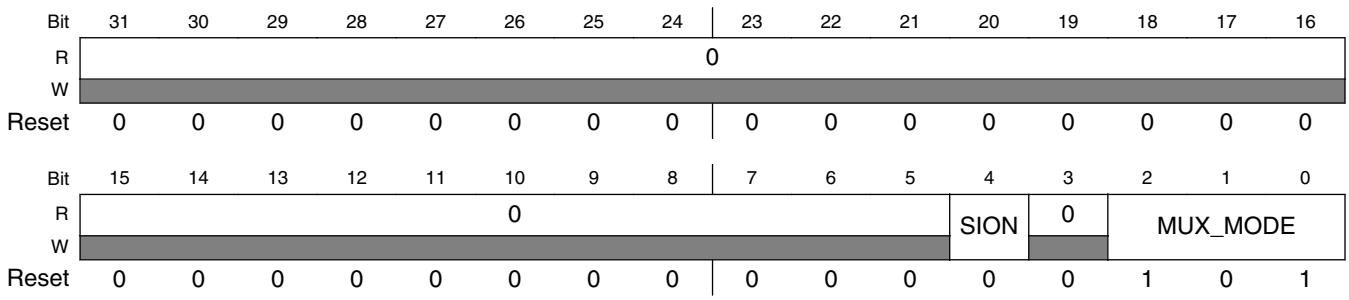
Open Drain = kann Pin nur auf Low ziehen; nur für Outputs (bspw. bei Bussen)

Table continues on the next page...

Field	Description
10–8 Reserved	This read-only field is reserved and always has the value 0.
7–6 SPEED	Speed Field The operational frequency on GPIO pads is dependent on slew rate (SRE), speed (SPEED), and supply voltage (OVDD). See Operating Frequency for more details. 00 **LOW** — Low frequency (50 MHz) 01 **MEDIUM** — Medium frequency (100, 150 MHz) 10 **MEDIUM** — Medium frequency (100, 150 MHz) 11 **MAXIMUM** — Maximum frequency (100, 150, 200 MHz)
5–3 DSE	Drive Strength Field Select one of next values for pad: KEY_COL4. 000 **HIZ** — HI-Z → bei Inputs 001 **260_OHM** — 150 Ohm @ 3.3V, 260 Ohm @ 1.8V 010 **130_OHM** — 75 Ohm @ 3.3V, 130 Ohm @ 1.8V 011 **90_OHM** — 50 Ohm @ 3.3V, 90 Ohm @ 1.8V 100 **60_OHM** — 37 Ohm @ 3.3V, 60 Ohm @ 1.8V 101 **50_OHM** — 30 Ohm @ 3.3V, 50 Ohm @ 1.8V 110 **40_OHM** — 25 Ohm @ 3.3V, 40 Ohm @ 1.8V 111 **33_OHM** — 20 Ohm @ 3.3V, 33 Ohm @ 1.8V höhere Leistung, steilere Flanke, mehr Überschwingung, mehr EMV
2–1 Reserved	This read-only field is reserved and always has the value 0.
0 SRE	Slew Rate Field Slew rate control. The operational frequency on GPIO pads is dependent on slew rate (SRE), speed (SPEED), and supply voltage (OVDD). See Operating Frequency for more details. 0 **SLOW** — Slow Slew Rate 1 **FAST** — Fast Slew Rate

36.4.130 Pad Mux Register (IOMUXC_SW_MUX_CTL_PAD_KEY_COL4)

Address: 20E_0000h base + 218h offset = 20E_0218h



IOMUXC_SW_MUX_CTL_PAD_KEY_COL4 field descriptions

Field	Description
31–5 Reserved	This read-only field is reserved and always has the value 0.
4 SION	Software Input On Field. Force the selected mux mode input path no matter of MUX_MODE functionality. 1 **ENABLED** — Force input path of pad KEY_COL4. 0 **DISABLED** — Input Path is determined by functionality of the selected mux mode (regular).
3 Reserved	This read-only field is reserved and always has the value 0.
MUX_MODE	MUX Mode Select Field. Select 1 of 6 iomux modes to be used for pad: KEY_COL4. NOTE: Pad KEY_COL4 is involved in Daisy Chain. 000 **ALT0** — Select signal FLEXCAN2_TX. 001 **ALT1** — Select signal IPU1_SISG4. 010 **ALT2** — Select signal USB_OTG_OC. - Configure register IOMUXC_USB_OTG_OC_SELECT_INPUT for mode ALT2. 011 **ALT3** — Select signal KEY_COL4. 100 **ALT4** — Select signal UART5_RTS_B. - Configure register IOMUXC_UART5_UART_RTS_B_SELECT_INPUT for mode ALT4. 101 **ALT5** — Select signal GPIO4_IO14.