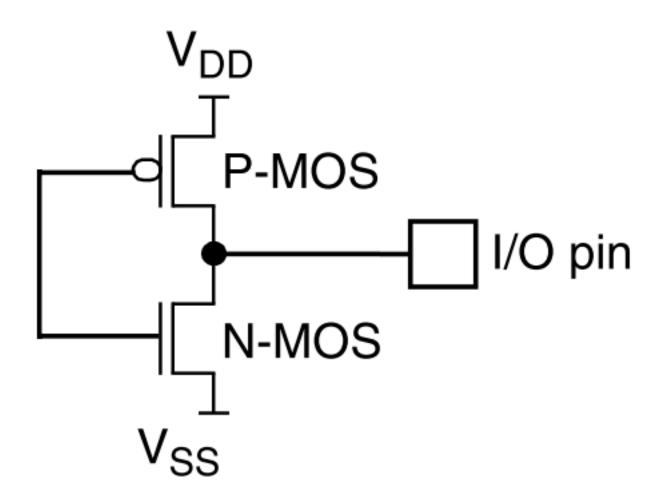
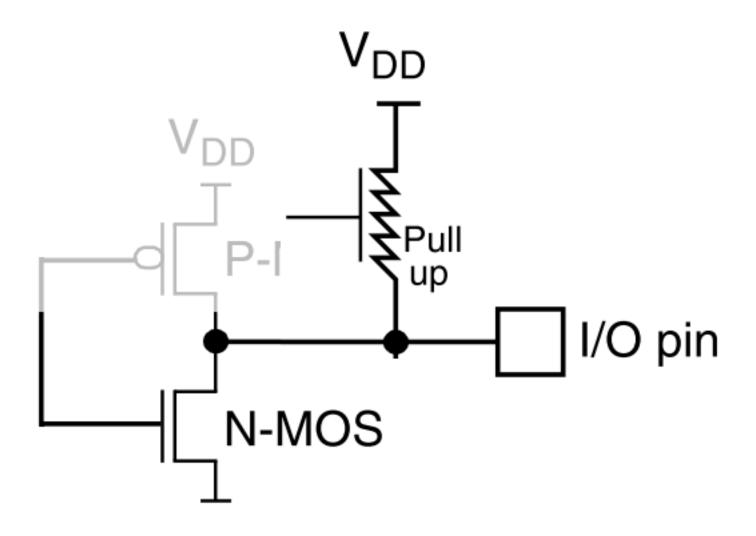
- Output
 - Push-pull
 - open-drain+pull-up/down
- Input
 - floating
 - pull-up/down
 - analog

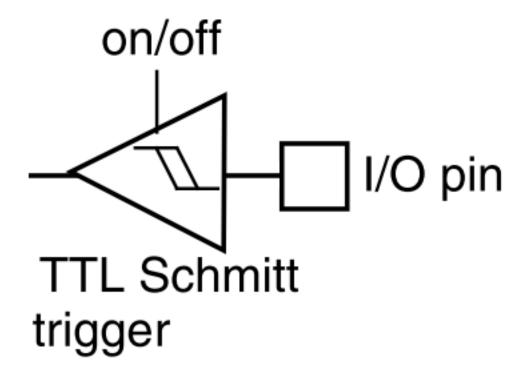
Push-pull



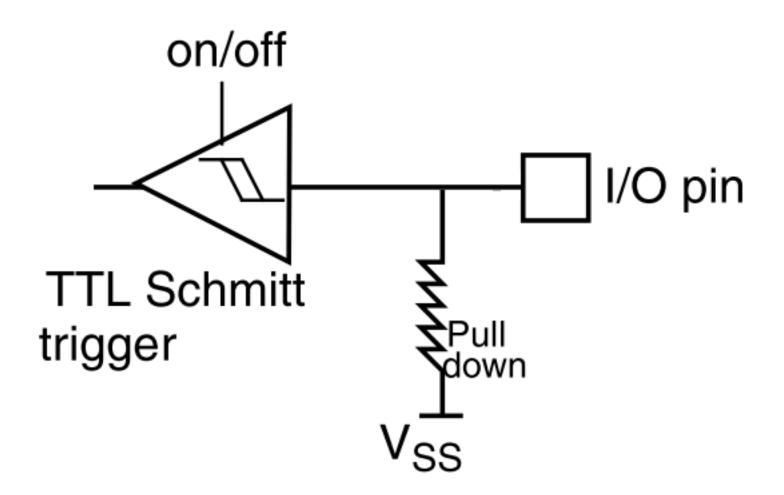
Open Drain + Pull up



Floating



Pull down



GPIO port output type register (GPIOx_OTYPER) (x = A..I/J/K)

Address offset: 0x04

Reset value: 0x0000 0000

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	Reserved														
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
OT15	OT14	OT13	OT12	OT11	OT10	ОТ9	ОТ8	OT7	ОТ6	OT5	OT4	ОТ3	OT2	OT1	OT0
rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw

Bits 31:16 Reserved, must be kept at reset value.

Bits 15:0 **OTy**: Port x configuration bits (y = 0..15)

These bits are written by software to configure the output type of the I/O port.

0: Output push-pull (reset state)

1: Output open-drain

GPIO port pull-up/pull-down register (GPIOx_PUPDR) (x = A..I/J/K)

Address offset: 0x0C

Reset values:

0x6400 0000 for port A

0x0000 0100 for port B

0x0000 0000 for other ports

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
PUPDF	R15[1:0] PUPDR14[1:0]		PUPDR13[1:0]		PUPDR12[1:0]		PUPDR11[1:0]		PUPDR10[1:0]		PUPDR9[1:0]		PUPDR8[1:0]		
rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
PUPDI	R7[1:0]	PUPD	R6[1:0]	PUPD	R5[1:0]	PUPDI	R4[1:0]	PUPDI	R3[1:0]	PUPD	R2[1:0]	PUPD	R1[1:0]	PUPDE	R0[1:0]
rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw

PUPDRy[1:0]: Port x configuration bits (y = 0..15)

These bits are written by software to configure the I/O pull-up or pull-down

00: No pull-up, pull-down

01: Pull-up

10: Pull-down

11: Reserved

Table 35. Port bit configuration table⁽¹⁾

MODER(i) [1:0]	OTYPER(i)	OSPEEDR(i) [B:A]	PUPDR(i) [1:0]		I/O configuration			
	0		0	0	GP output	PP		
	0	SPEED [B:A]	0	1	GP output	PP + PU		
	0		1	0	GP output	PP + PD		
01	0		1	1	Reserved			
01	1		0	0	GP output	OD		
	1		0	1	GP output	OD + PU		
	1		1	0	GP output	OD + PD		
	1		1	1	Reserved (GP ou	tput OD)		

Devamı reference manual 269. sayfada.

MODER(i) [1:0]	OTYPER(i)	1	EEDR(i) B:A]	PUPDR(i) [1:0]		I/O configuration		
	х	х	х	0	0	Input	Floating	
00	Х	х	х	0	1	Input	PU	
00	Х	х	х	1	0	Input	PD	
	Х	х	х	1	1	Reserved (input t	loating)	