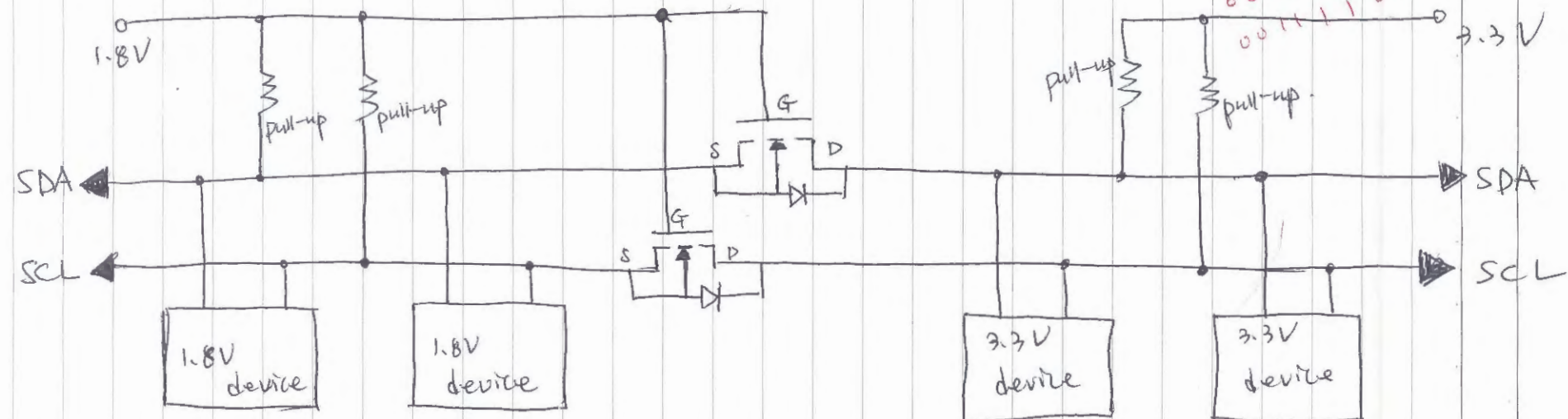


* Bi-directional level shifter for I²C-bus and other system.



- ① 1.8V device → "Low" : 0
- ② 1.8V device → "High" : 0
- ② 3.3V device → "Low" : 0
- ④ 3.3V device → "High" :

"FET : ON"
 source : 0V, Drain : 0V - V_{DS(ON)}

"FET : OFF"
 source : 1.8V, Drain : 3.3V

"FET : ON"
 Drain : 0V, source : 0V + V_{DS(ON)}

"FET : OFF"
 Drain : 3.3V, source : 1.8V

$R_{DS(ON)} = 35\text{ m}\Omega$
 $V_{GS(th)} = 0.6 \sim 1.2\text{ V}$
 $V_{DS} = 20\text{ V}$

N-channel E-MOSFET

$V_{DS(ON)} = \text{maximum } 1.2\text{ V}$
 $I_S = 1.3\text{ A @ } 25^\circ\text{C}$

