

OTA  
SHORT  
PMOS

$$W = 5\mu m$$

$$L = 1\mu m$$

$$NF = 6$$

$$W \cdot NF = 9\mu m$$

LONG  
PMOS

$$W = 63\mu m$$

$$L = 1\mu m$$

$$NF = 7$$

$$W \cdot NF = 9\mu m$$

NMOS

$$W = 18\mu m$$

$$L = 1\mu m$$

$$NF = 6$$

$$W \cdot NF = 3\mu m$$

#(3)  
↓

$$= 18 \text{ Fingers}$$

$$+ 63 \text{ Fingers} = 81 \text{ Fingers}$$

Filler:  $(132\mu m \times 45\mu m = 5940\mu m^2)$

Resistors (high poly,  $W = 0,35\mu m$ ):

$$\underline{R_1:} L_1 = 36\mu m \hat{=} 2\mu m \times 18$$

$$\underline{R_2:} L_2 = 38\mu m \hat{=} 2\mu m \times 19$$

$$\underline{R_3:} L_3 = 126\mu m \hat{=} 2\mu m \times 63$$

$$\underline{R_4:} L_4 = 76\mu m \hat{=} 2\mu m \times 38$$

Floating

$$\left. \begin{array}{l} L = 2\mu m \\ \times 158 \end{array} \right\}$$

NMOS

$$W = 2\mu m$$

$$L = 1\mu m$$

$$NF = 7$$

$$W \cdot NF = 3\mu m$$

$$W \cdot NF = 3\mu m$$

#(9)  
↓

Capacitors ( $113, 11\mu m$ ):

$$\underline{C_1:} W_1 = L_1 = 3\mu m, 7 \times 10 = 70 (\sim 142\text{pF})$$

$$\underline{C_2:} W_2 = L_2 = 3\mu m, 7 \times 6 = 42 (\sim 851\text{pF})$$

$$\underline{2 \times C_{3i}:} W_3 = L_3 = 3\mu m, 1 \times 5 = 5 (\sim 101\text{pF})$$

$$\underline{2 \times C_{DEC}:} W_{DEC} = L_{DEC} = 3\mu m, 1 \times 17 = 17 (\sim 223\text{pF})$$

↳ Decoupling Capacitors

1x11	1x5
7x10	7x6
1x11	1x5

$3\mu m \times 3\mu m$   
 $9 \times 16 \text{ array!}$