

(19)
(12)

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(72)

2 92

(74)

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(54)

MOSFET

2f

1
2a 2f
< >
10 : 12 :
14 : 16 :
18 : 20 : 1
22 : 24 : 2
26 : 28 :
30 :

eld Effect Transistor; MOS FET) , (Metal Oxide Semiconductor Fi
 (organic low -k) (damascene)
 가 MOSFET /
 p n n p pn ,
 (short channel effect) /
 가
 DRAM 0.13 μ m 가
 (damascene) 가
 MOSFET (metal replacement gate process; MRG
 , MRG (12
 (10) MOSFET (14) (16) WN/W
 (10) (18) (Al₂O₃) (12) (10) / ((18) (14) (14) ,
 (18) (14) (14) ,
 가
 (chemical-mechaniscal polishing ; CMP)
 MOSFET
 가
 가
 2a 2f (10) 1 (20) (22) 2 (24)
 2 (20,24) (22) 2 (24) 50 200 1 2
 22) - - . (2a). (

- 1 , , CMP
7. ,
8. ,
9. ,
10. WN/W ,
11. ,
- NF₃ SF₆ 가 Ar He 가 가



