



CCD

CMOS

CMOS

1967

, CCD

1970

가

1980

가

1990

가

Digital Video

CCD

가

CMOS

1995

Hitachi

1979

CMOS

CCD

CMOS

CCD

CMOS

가

, CCD

CCD(

, Charge

Coupled Device)

CMOS

CMOS

, 1989 CMOS

- 1990

Hamamatsu, 1990

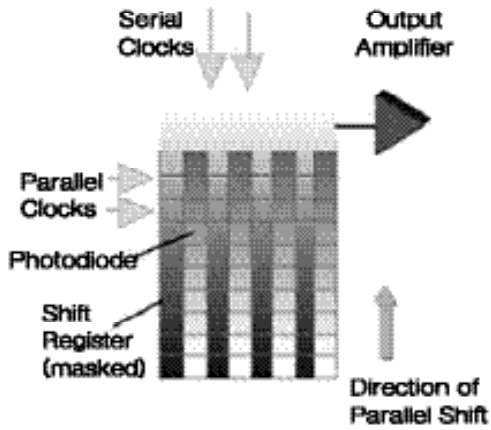
CMOS

1) : <http://www.proshots.com/US/en/corp/researchDevelopment>

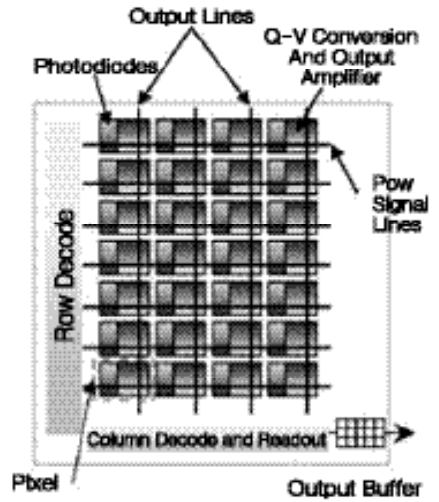
[1] CCD CMOS

Architecture¹⁾

Interline Transfer CCD

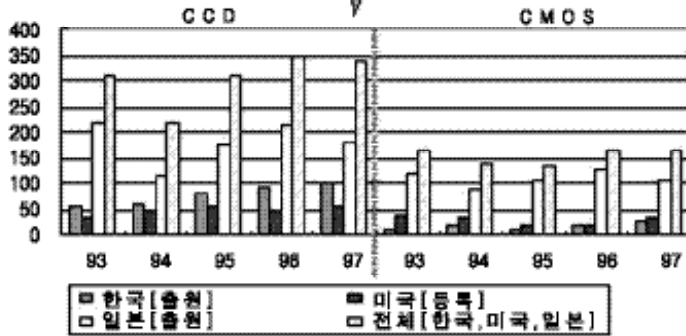
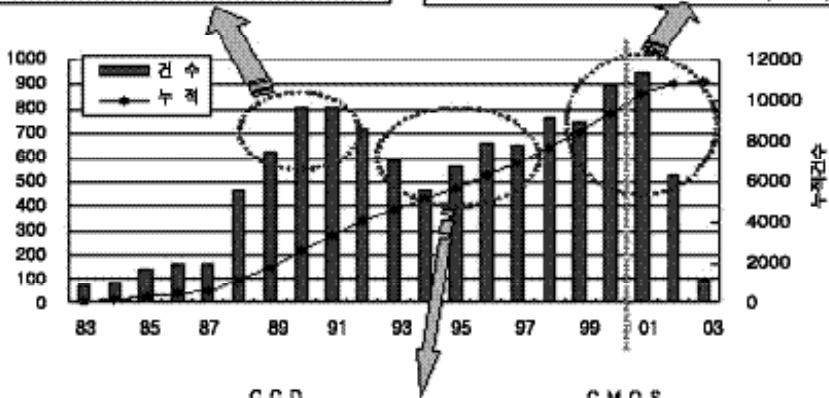
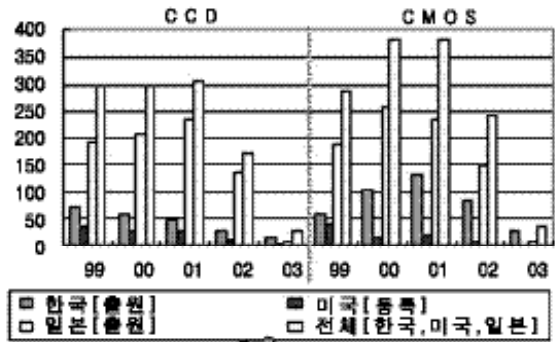
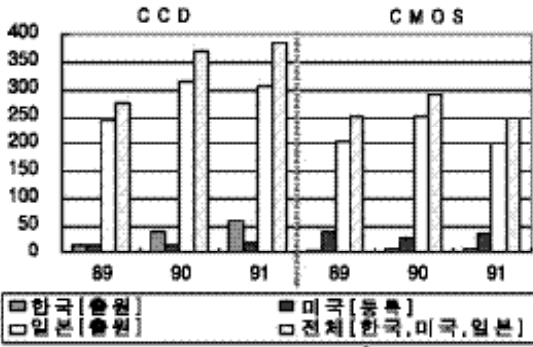


CMOS Imager



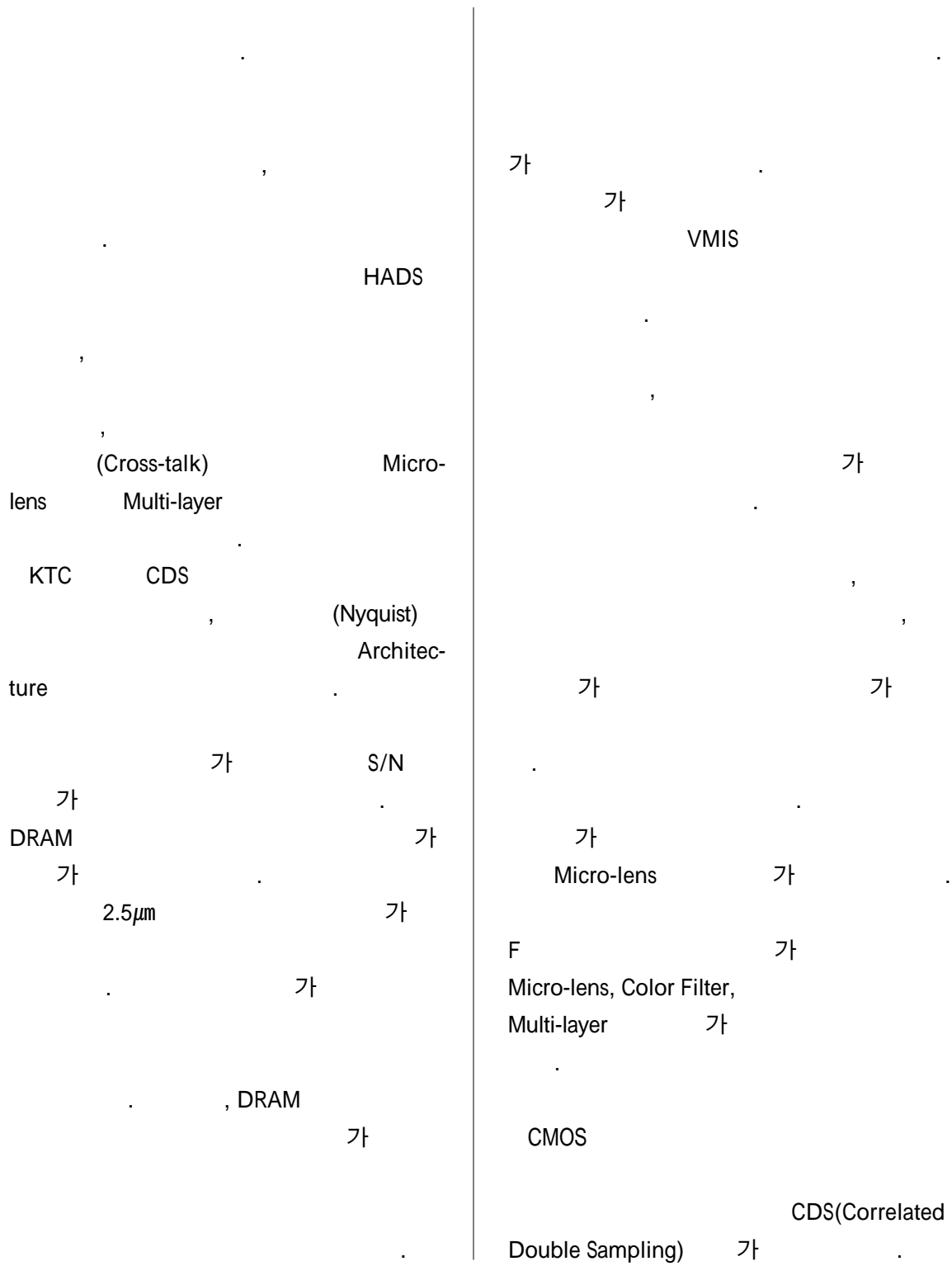
- Foundry 가
 - 가
 가 가
 CCD

,
 () 가
 . CCD
 , /
 CCD
 S/N 가 가
 가
 OFD
 OFD



[2] (CMOS, CCD)

가



CDS

CDS

CDS

가

Fill Factor

가

CDS

()

가

가

One-Chip 가

Fill Factor

One-Chip

, CDS

p

가

가

가

CMOS

가

, CCD

CMOS