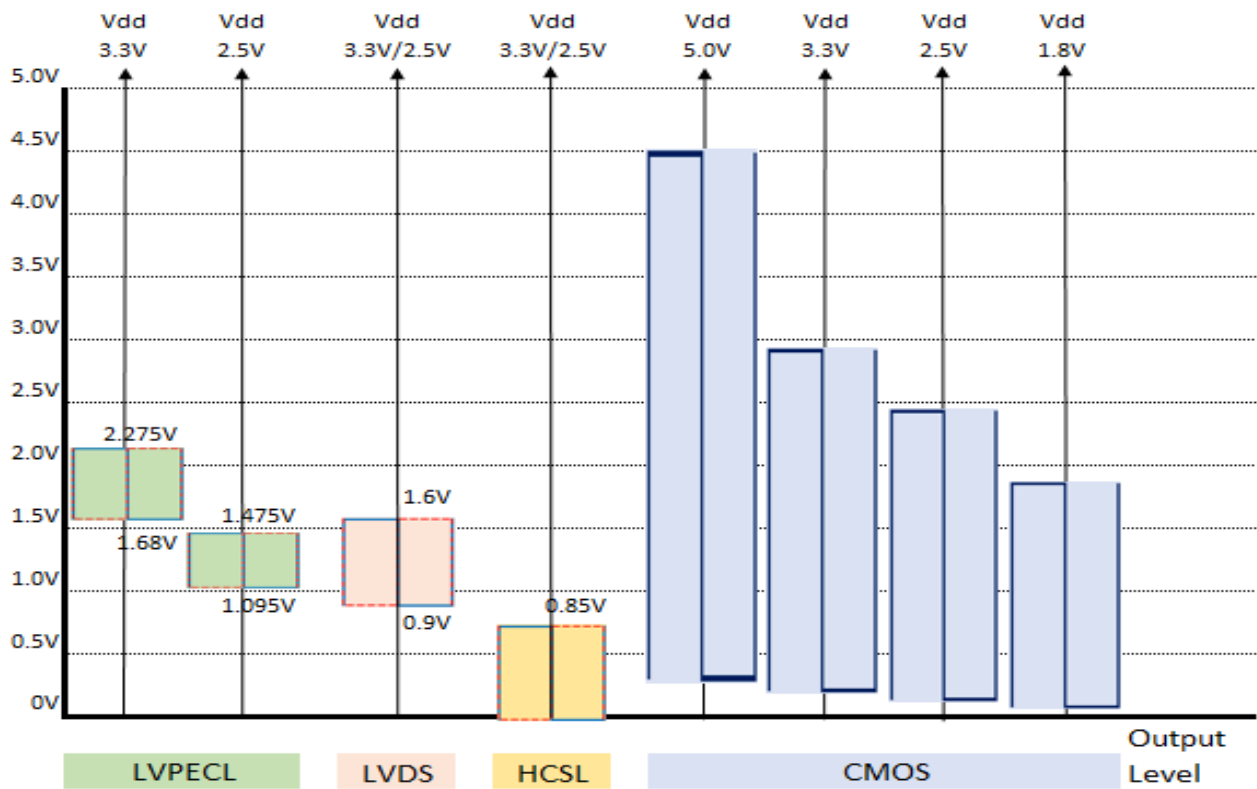




AKER TECHNOLOGY

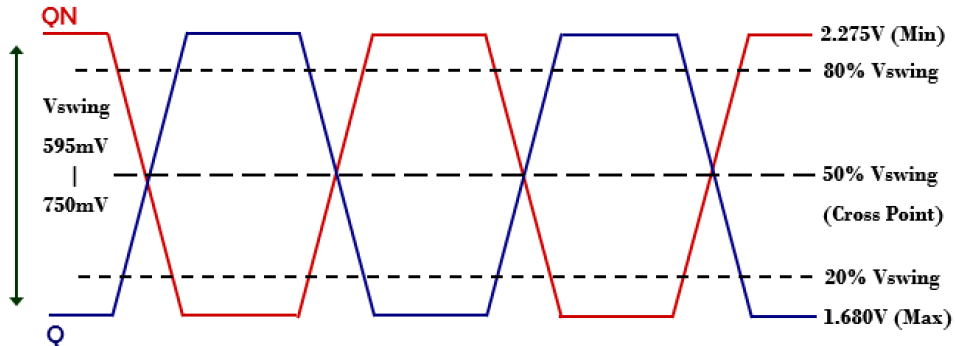
Oscillator Comparison Output Levels and Applications

Main Application and Output Level, Test Circuit

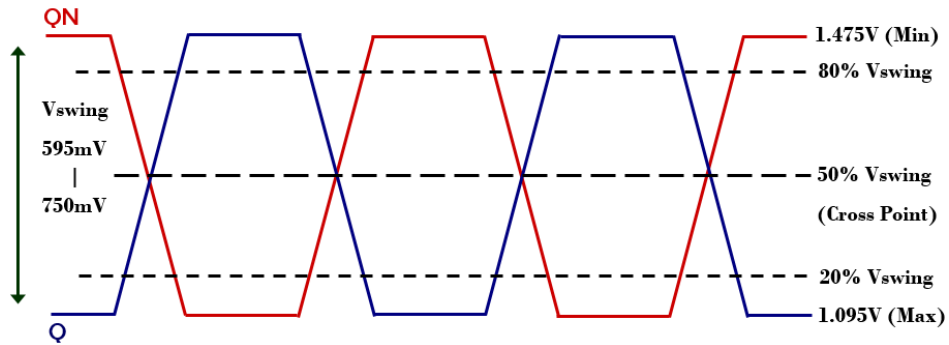


LVPECL Output Level

Vdd: 3.3V (1.68V~2.275V)



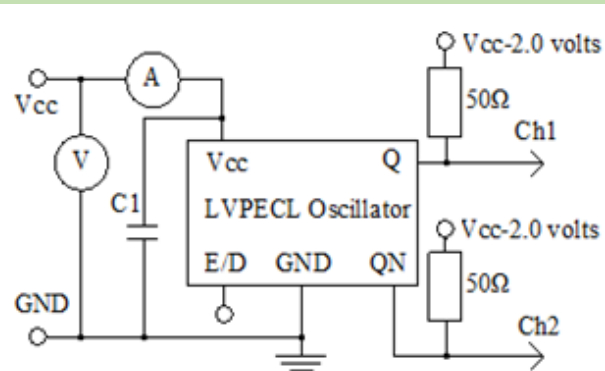
Vdd: 2.5V (1.095V ~ 1.475V)



LVPECL Applications

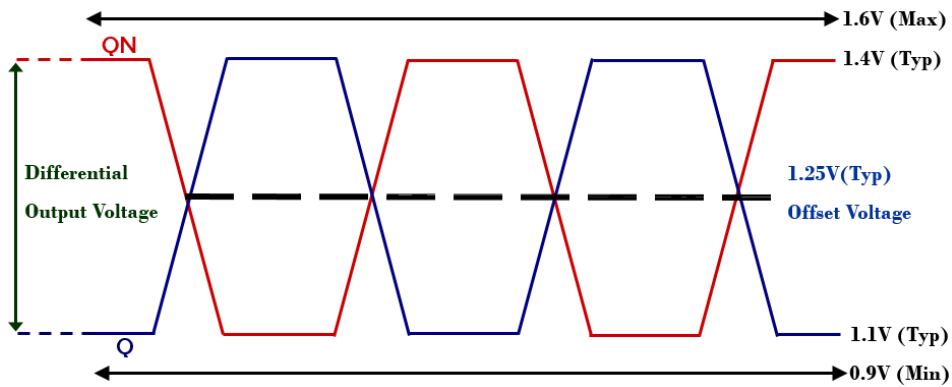
- Base Station
 - Ethernet
 - Router
 - Transceiver
 - Optical module
 - SONET/SDH
- (Synchronous Optical Network)

Test Circuit



LVDS Output Level

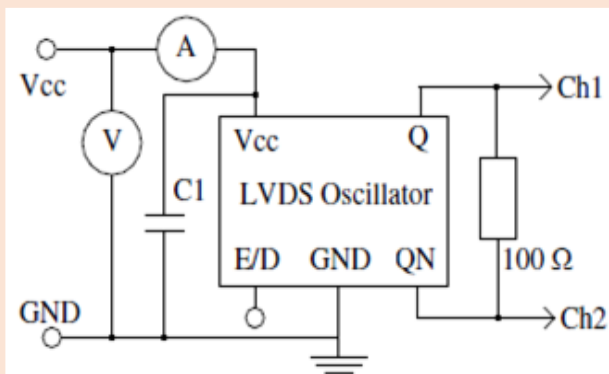
Vdd: 3.3V/2.5V/1.8V (0.9V ~ 1.6V) or wide voltage 1.63V ~ 3.63V (0.9V ~ 1.6V)



LVDS Applications

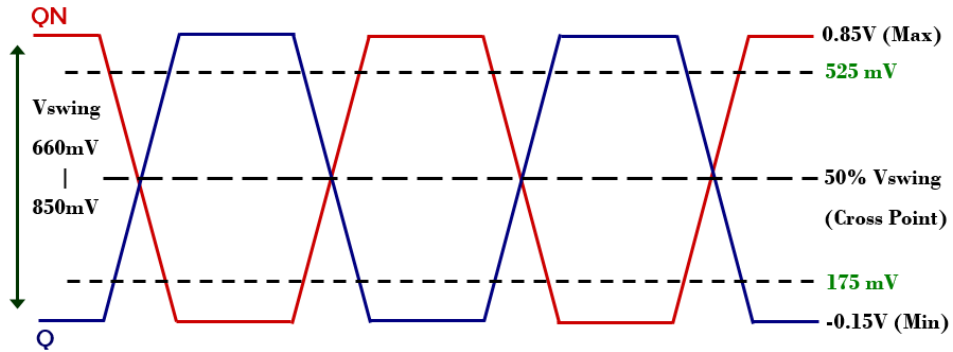
- High-speed backplane
- Cable
- Data transmission
- Clock distribution
- CCD camera (car)
- FPGA
- Ethernet
- Satellite ground

Test Circuit



HCSL Output Level

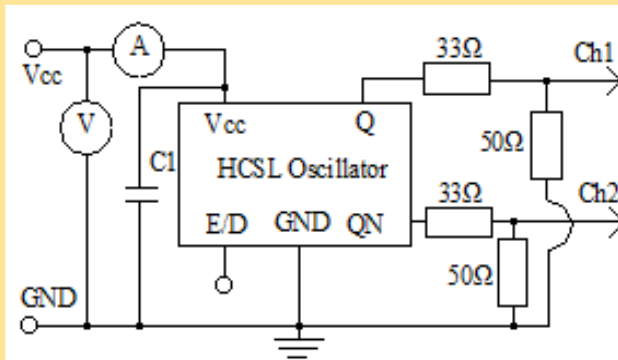
Vdd: 3.3V/2.5V/1.8V (-0.15V ~ 0.85V) or wide voltage 1.63V ~ 3.63V (-0.15V ~ 0.85V)



HCSL Applications

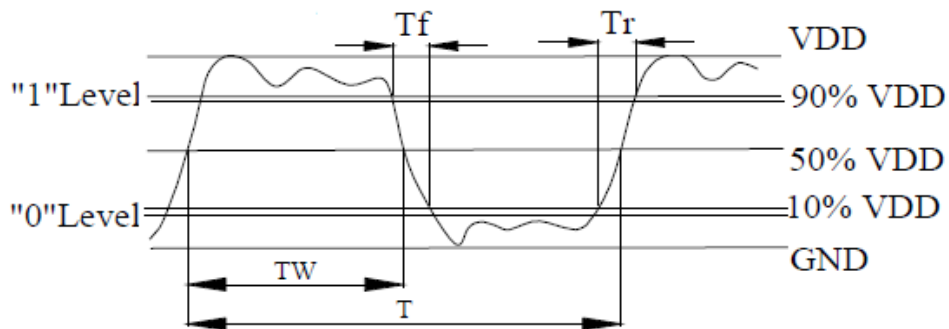
- All kinds of computers
- GPS-navigation (PCIe)
- Ethernet
- Entertainment (PCIe) camera

Test Circuit



CMOS Output Level

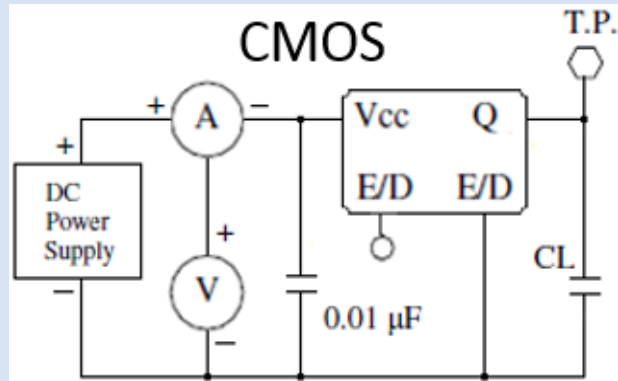
V_{dd}: 5.0V (0.50V~4.50V) 、 3.3V (0.33V~2.97V) 、 2.5V (0.25V~2.25V) 、 1.8V (0.18V~1.62V)
 or wide voltage 1.62V ~ 3.63V (0.16V~3.63V)



CMOS Applications

- Digital camera
- PC camera
- Toy
- Security system
- Image sensor
- Video phone
- Fingerprint reader

Test Circuit



Note: Applications such as FPGA, Ethernet, cameras, image sensors, GPS and AI are all in high demand and use LVPECL, LVDS, and HCSL in their design.