

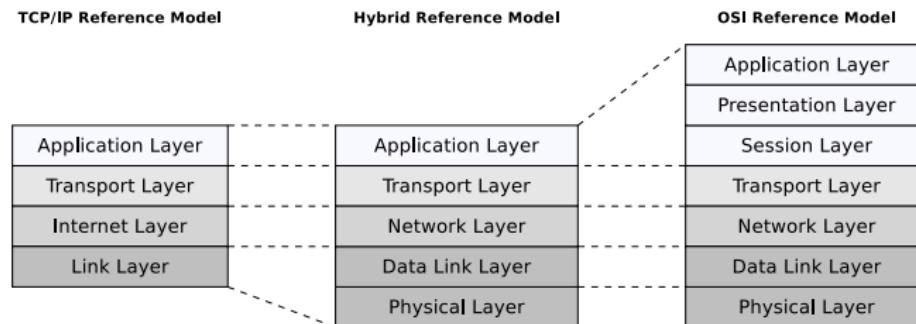
# Network Components

Prof. Dr. Christian Baun

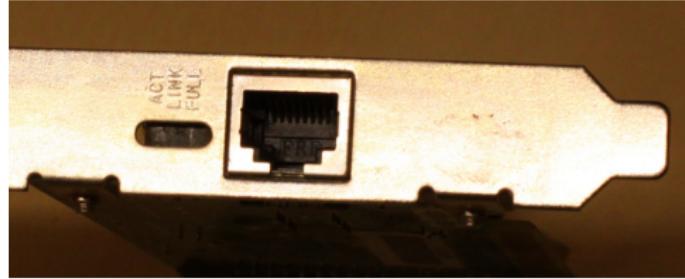
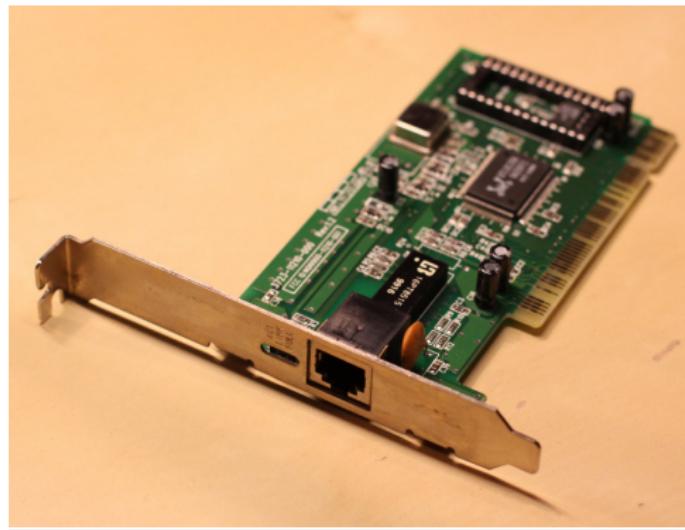
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# Task

- The slides of this slide set contain photos of various network components
- Try to assign the network components to the layers in the hybrid reference model



## Component 1

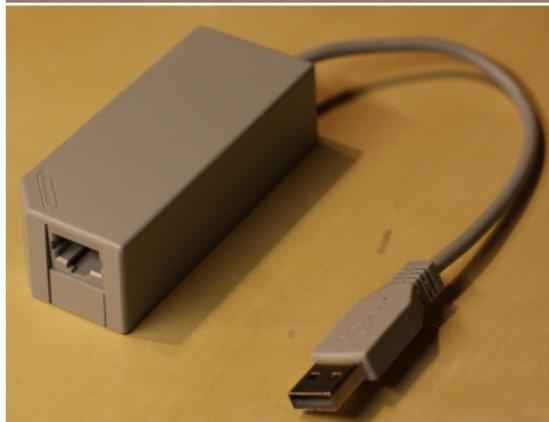




## Component 2



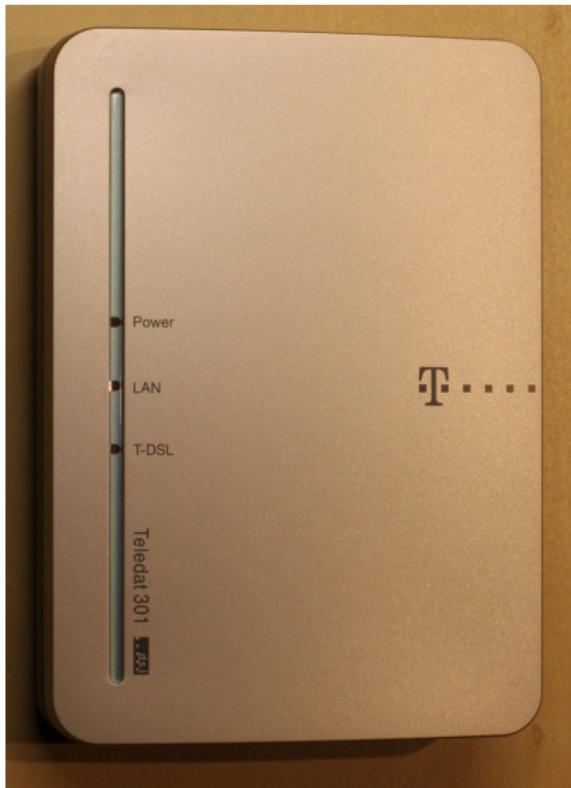
## Component 3



## Component 4



## Component 5



## Component 6



The screenshot shows a web browser window titled "Siemens - Google Chrome" displaying the URL "192.168.1.100/html/CurrentStatus.html". The page header features the Siemens logo and the text "WLAN Bridge". Below the header, there are four navigation links: "Current Status", "Setup Wizard", "Advanced Setup", and "Statistics". The main section is titled "Current Status". It contains two tables: "Device IP Information" and "WLAN 802.11b /g Status".

Device IP Information	
MAC Address	» 00:1d:6a:38:61:7e
Get IP From	» Manual
IP Address	» 192.168.1.100
Subnet Mask	» 255.255.255.0
Default Gateway	» 192.168.1.1

WLAN 802.11b /g Status	
ESSID	» ALICE-WLAN
Channel	» 11
Rate	» Auto
Security Level	» Open System /Encryption Enabled

Below the tables, a physical Siemens WLAN Bridge device is shown. The device has a metal case with a ribbed top edge. On the left side, there is an "ATN" button and a "Reset" button. In the center, there is an Ethernet port labeled "Ethernet". On the right side, there is a small circular port labeled "5VDC2A". A black antenna is attached to the top left of the device.

## Component 7



## Component 8



# Component 9



```
# telnet 10.0.0.5  
Trying 10.0.0.5...  
Connected to 10.0.0.5  
Escape character is '^]'.  
  
HP JetDirect
```

```
Please type "?" for HELP, or "/" for current settings
```

```
> /  
==JetDirect Telnet Configuration===  
Firmware Rev. : A.08.49  
MAC Address : 08:00:09:7f:56:63  
Config By : USER SPECIFIED  
IP Address : 10.0.0.5  
Subnet Mask : 255.255.255.0  
Default Gateway : 10.0.0.1  
Syslog Server : Not Specified  
Idle Timeout : 90 Seconds  
Set Cmnty Name : Not Specified  
Host Name : LASERJET  
DHCP Config : Disabled
```



# Component 10



# Component 11



0022435567E7

## Component 12

```
$ telnet 192.0.0.192  
Trying 192.0.0.192...  
Connected to 192.0.0.192.  
Escape character is '^]'.  
  
HP JetDirect
```

```
Please type "?" for HELP, or "/" for current settings  
> /
```

```
====JetDirect Telnet Configuration====
```

```
Firmware Rev. : F.08.20  
MAC Address : 00:30:6e:fc:97:c8  
Config By : Default IP
```

```
IP Address : 192.0.0.192  
Subnet Mask : Not Specified  
Default Gateway : 192.0.0.192  
Syslog Server : Not Specified  
Idle Timeout : 90 Seconds  
Set Cmnty Name : Not Specified  
Host Name : Not Specified
```

```
DHCP Config : Enabled  
Passwd : Disabled  
IPX/SPX : Enabled  
DLC/LLC : Enabled  
Banner page : Enabled
```

S/N:SG421BB4AA  
AD:00306EFC97C8



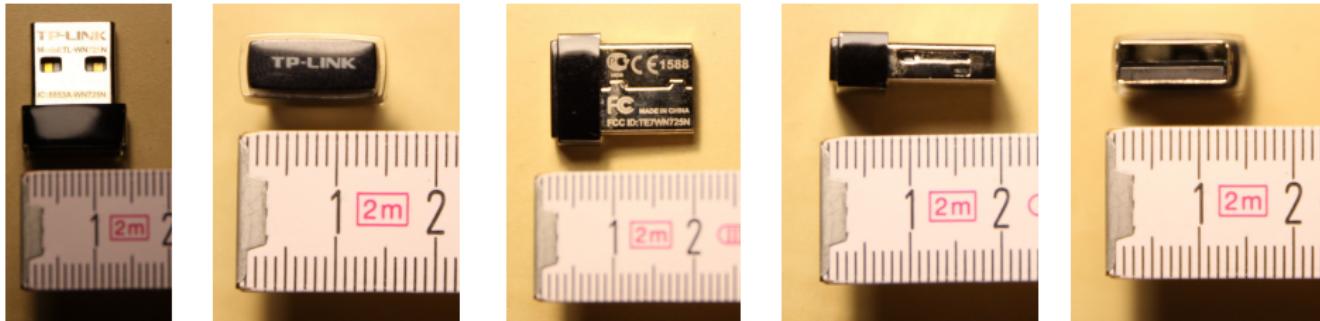
# Component 13



## Component 14

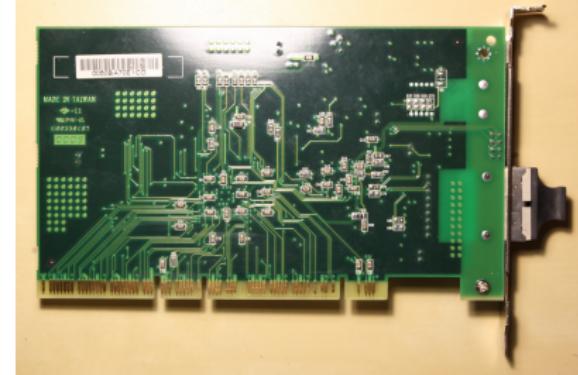


# Component 15



```
[221411.207865] usb 1-2: USB disconnect, device number 90
[221703.999606] usb 1-1: USB disconnect, device number 91
[221732.387524] usb 1-1: new high-speed USB device number 92 using xhci_hcd
[221732.528114] usb 1-1: New USB device found, idVendor=0bda, idProduct=8179
[221732.528118] usb 1-1: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[221732.528121] usb 1-1: Product: 802.11n NIC
[221732.528123] usb 1-1: Manufacturer: Realtek
[221732.528126] usb 1-1: SerialNumber: 00E04C0001
[221733.120663] r8188eu: module is from the staging directory, the quality is unknown, you have been warned.
[221733.124373] Chip Version Info: CHIP_8188E_Normal_Chip_TSMC_A_CUT_1T1R_RomVer(0)
[221733.150775] usbcore: registered new interface driver r8188eu
[221733.152618] r8188eu 1-1:1.0 wlx6466b31c4fbc: renamed from wlan0
[221733.177891] IPv6: ADDRCONF(NETDEV_UP): wlx6466b31c4fbc: link is not ready
[221733.178917] r8188eu 1-1:1.0: firmware: direct-loading firmware rtlwifi/rtl188eufw.bin
[221733.544034] MAC Address = 64:66:b3:1c:4f:bc
```

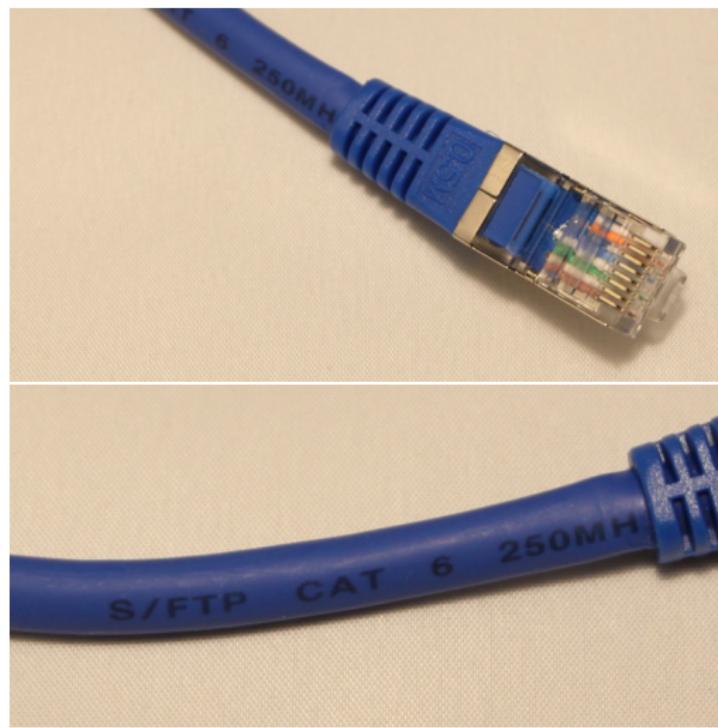
# Component 16



## Component 17



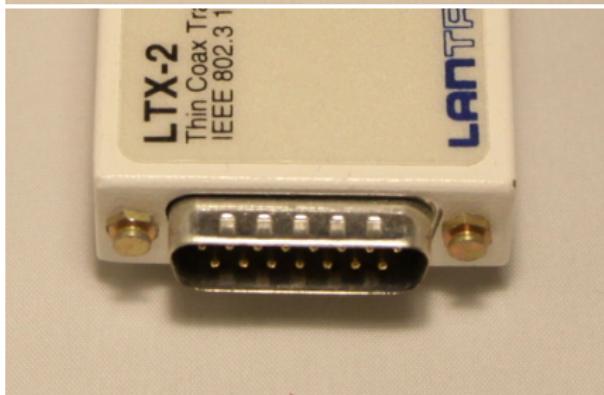
## Component 18



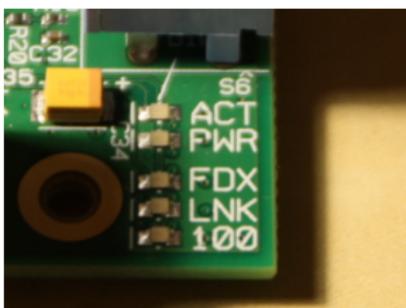
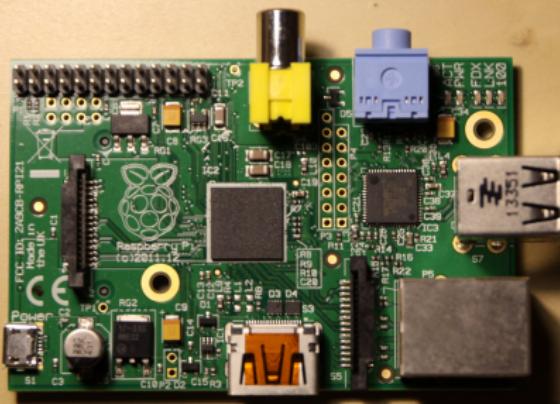
# Component 19



# Component 20



## Component 21



# Component 22



- Components of dry air:
  - Nitrogen ( $N_2$ )
  - Oxygen ( $O_2$ )
  - Argon ( $Ar$ )
  - Carbon dioxide ( $CO_2$ )
  - Neon ( $Ne$ )
  - Helium ( $He$ )
  - Methane ( $CH_4$ )
  - Krypton ( $Kr$ )
  - Hydrogen ( $H_2$ )
  - ...