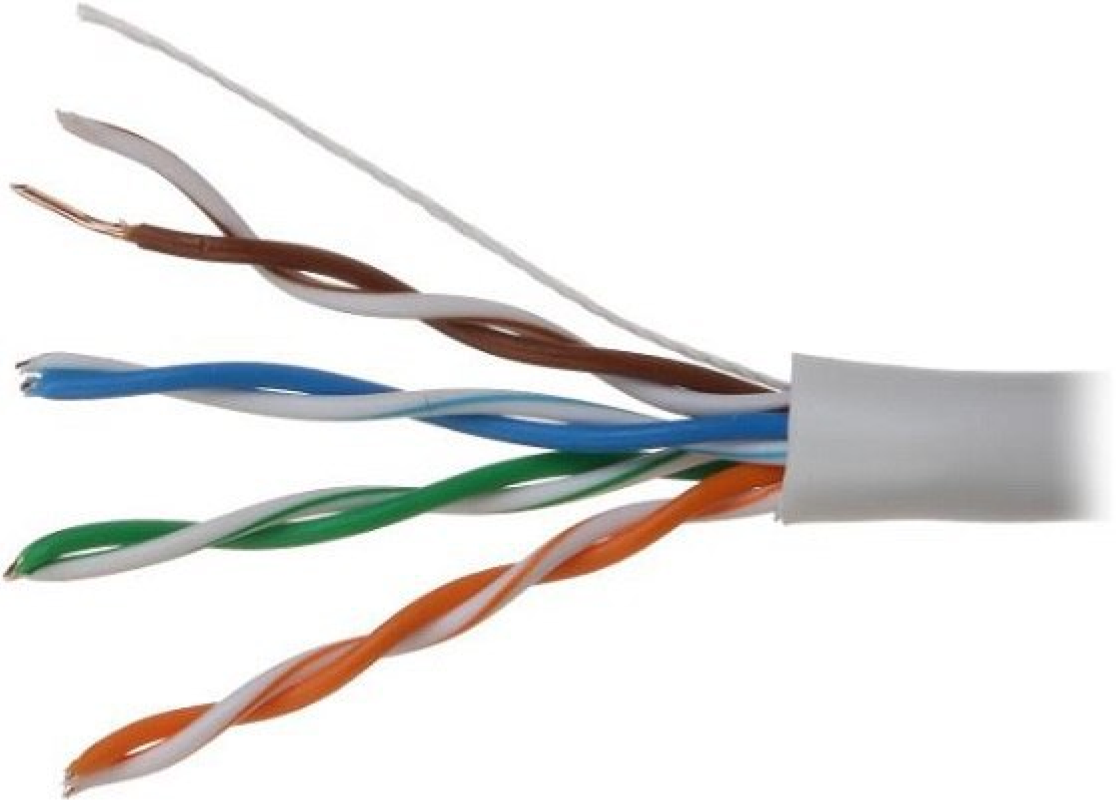
禪

[illegible]

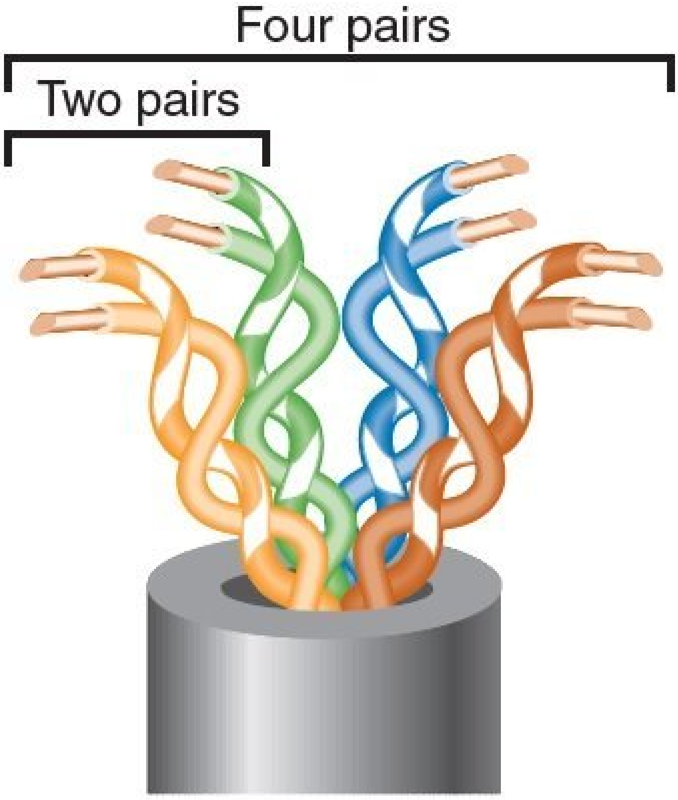
[illegible] (Twisted-Pair)



[illegible] (Twisted-Pair) [illegible] 0.4 [illegible] 0.8 [illegible]. [illegible] (STP [illegible] UTP)[illegible] [illegible] Twisted-Pair [illegible].

[illegible]

[illegible] (Twisted-Pair) [illegible] 0.4 [illegible] 0.8 [illegible]. [illegible]. [illegible].



[illegible]: [illegible]

[illegible] (Fast Ethernet) [illegible] 100 [illegible] Gigabit Ethernet [illegible] 1000 [illegible] 1991 [illegible] TIA / EIA [illegible] TIA / EIA 568 [illegible] TIA / EIA 568 [illegible] (Cat 3، 5، 5e، 6، 6a [illegible] 7 [illegible]) [illegible] (Cat 4 [illegible]) [illegible] Cat 5e [illegible] Cat5 [illegible] 100 [illegible] 10 [illegible] Cat6 [illegible] 1 [illegible] 10 [illegible].

[illegible]	[illegible]	[illegible]	[illegible]
Cat 3	16 [illegible]	10 [illegible]	[illegible] 4 [illegible] 10 [illegible]
Cat 5	100 [illegible]	100 [illegible]	[illegible] Fast Ethernet

[illegible]	[illegible]	[illegible]	[illegible]
Cat 5e	[illegible] 350	[illegible] 1000 [illegible] (Gbps 1) [illegible]	[illegible] Cat 5 [illegible].
Cat 6	[illegible] 250	[illegible] 1000 [illegible] (Gbps 10) – [illegible]	[illegible] ([illegible]) [illegible].
Cat 6a	[illegible] 500	[illegible] 10000 [illegible] (Gbps 10) -[illegible]	[illegible]. [illegible] Cat 5e [illegible] Cat 5، Cat 6 [illegible].
Cat 7	[illegible] 600	[illegible] 10000 [illegible] (Gbps 10) -[illegible]	[illegible]. [illegible]. [illegible] GG45 [illegible] RJ-45 [illegible] TERA [illegible]. [illegible].
Cat7a	MHz 1000-1200	Gbps 100–40	[illegible] ISO/IEC 2010 [illegible]. [illegible].

[illegible] cat8/8.1 [illegible] cat 8.2 [illegible] 40 [illegible] 2000 [illegible] 30 [illegible]. [illegible]. [illegible] Cat 5e [illegible].

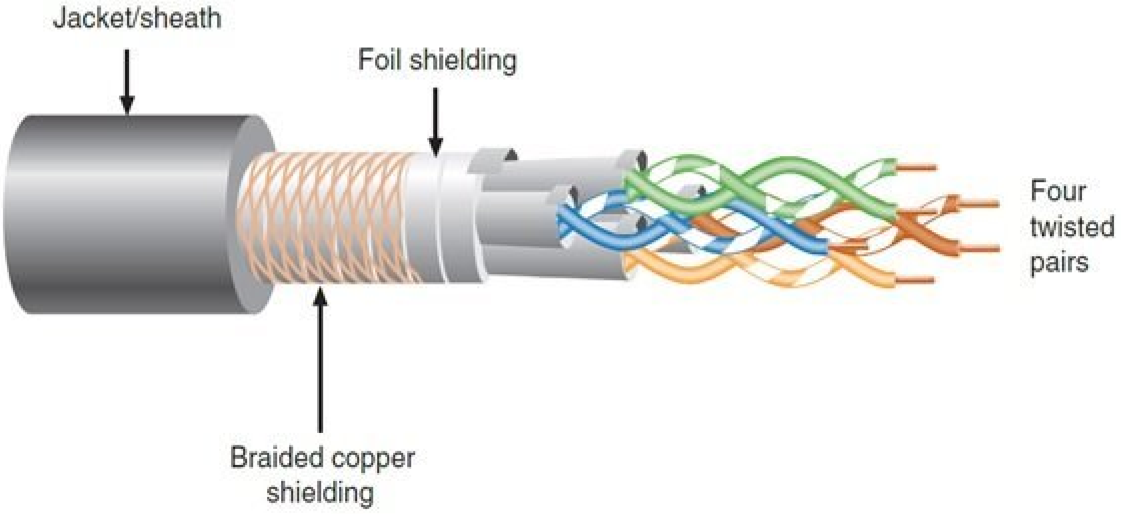
[illegible] STP ([illegible]) [illegible] SFSTP ([illegible]) [illegible] UTP ([illegible]) [illegible].

STP ([illegible])

[illegible] STP [illegible] Shielded Twisted Pair [illegible]. [illegible] STP [illegible]. [illegible]. [illegible]. [illegible]. [illegible] ([illegible]) [illegible]. [illegible]. [illegible] STP [illegible]:

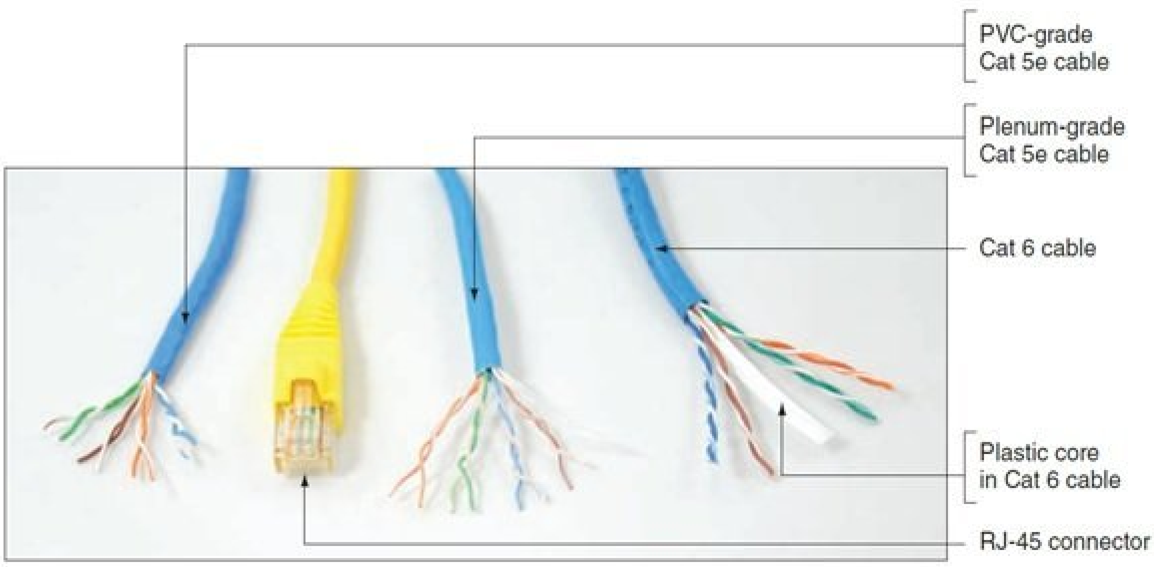
1. • [illegible]
2. • [illegible]
3. • [illegible]
4. • [illegible]

[illegible] STP [illegible].



UTP ([illegible])

[illegible] UTP [illegible] Unshielded Twisted Pair [illegible]
[illegible]. [illegible] UTP [illegible]
[illegible]. [illegible] UTP [illegible]
STP [illegible]. [illegible] STP [illegible]. [illegible]
[illegible] UTP [illegible]: Cat 5e [illegible] PVC [illegible] Cat 5e [illegible] Cat 6 [illegible]
[illegible] UTP [illegible] RJ-45 [illegible].



[illegible] STP [illegible] UDP

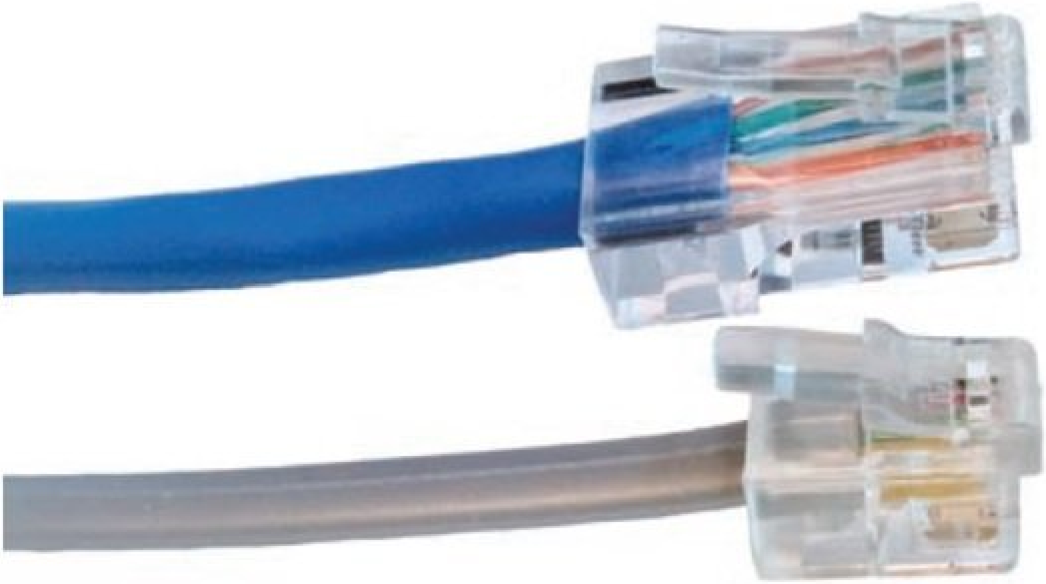
STP [illegible] UTP [illegible]
[illegible]:

[illegible]- STP [illegible] UTP [illegible] 10 [illegible] 100 [illegible]
[illegible] 1 [illegible] 10 [illegible].

[illegible] STP [illegible] UTP [illegible]
[illegible]. [illegible] STP [illegible]
[illegible] UTP [illegible]. [illegible]

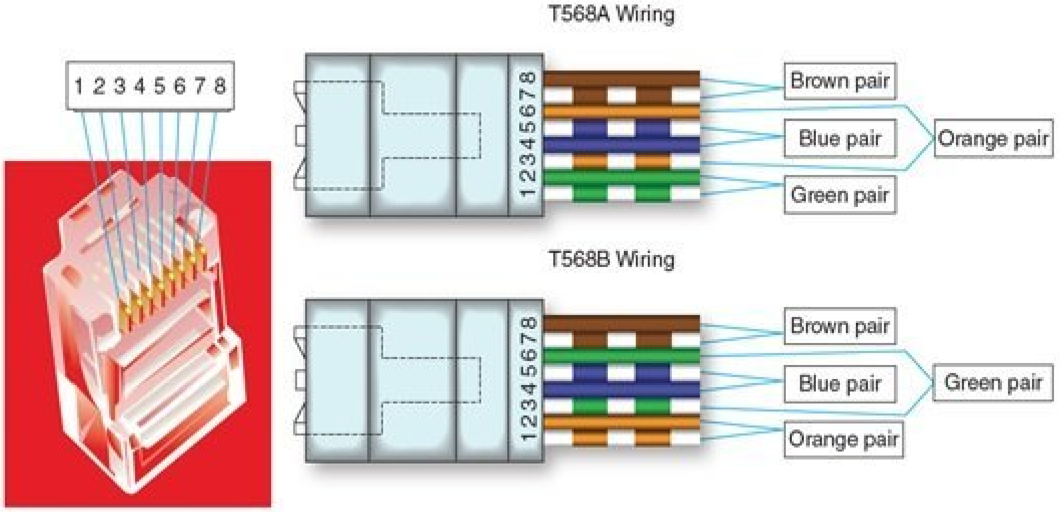
[illegible] UTP [illegible]. [illegible] UTP [illegible].

[illegible] STP ו UTP [illegible] RJ-45 [illegible] RJ-11 [illegible]. [illegible] RJ-45 ו RG-11 [illegible]. [illegible] RJ-45 [illegible].



- [illegible] - [illegible] STP [illegible] UTP [illegible]. [illegible] UTP [illegible].
- [illegible] - [illegible] 1 [illegible] 10 [illegible] STP ו UTP [illegible] 100 [illegible] 328 [illegible].

[illegible]. TIA / EIA [illegible] RJ-45 [illegible]. TIA / EIA 568A ו TIA / EIA 568B [illegible] T568A ו T568B [illegible]. [illegible] RJ-45 [illegible]. [illegible] T568B [illegible]. [illegible] T568A [illegible]. [illegible]. Tx [illegible] Rx [illegible]. [illegible].

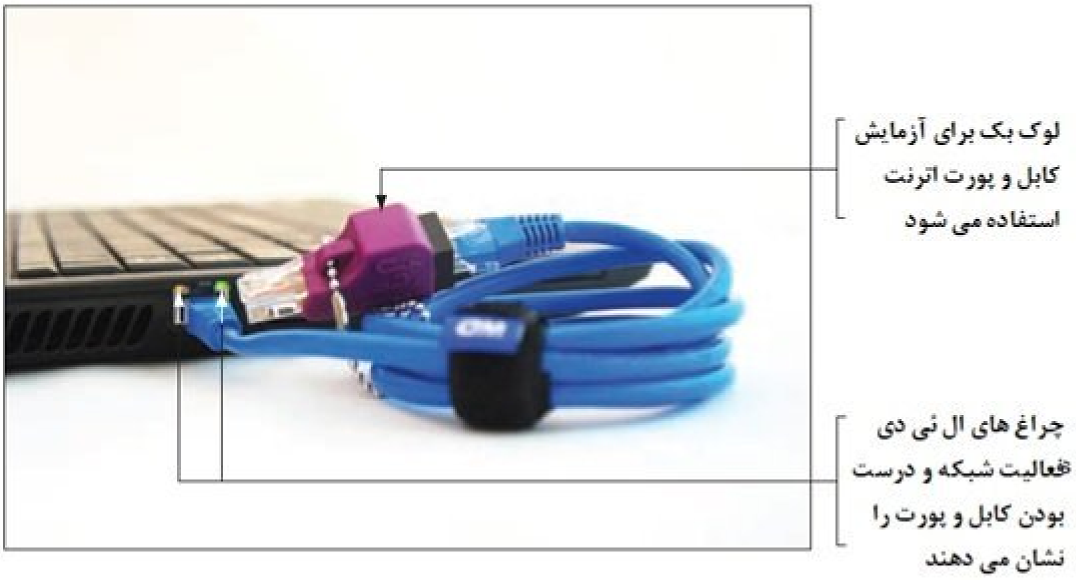


[illegible].

Pin #	T568A Color	T568B Color	Fast Ethernet function	Gigabit Ethernet function
1	White/green	White/orange	Rx1	Bidirectional+
2	Green	Orange	Rx1	Bidirectional-
3	White/orange	White/green	Rx1	Bidirectional+
4	Blue	Blue	Unused	Bidirectional+
5	White/blue	White/blue	Unused	Bidirectional-
6	Orange	Green	Rx2	Bidirectional-
7	White/brown	White/brown	Unused	Bidirectional+
8	Brown	Brown	Unused	Bidirectional-

[illegible] Fast Ethernet [illegible] T568A [illegible] T568B [illegible] Gigabit Ethernet [illegible] straight- [illegible] (patch) [illegible] RJ-45 [illegible] TIA/EIA 568 [illegible].

[illegible] RJ-45 [illegible].



[illegible]

[illegible] (Cat 6 [illegible] Cat 5e [illegible]) [illegible]
[illegible] 1 [illegible]
[illegible]
[illegible] 2 [illegible] 1 [illegible]
[illegible]
[illegible]
[illegible] USB، Wi-Fi ،2 [illegible]
[illegible] Ethernet Fast [illegible] Gigabit
Ethernet [illegible]
auto-negotiate [illegible]
[illegible]
[illegible]
[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
pair 2	Cat 5 [illegible]	100	100	100Base-T Fast Ethernet
pair 4	Cat 5 [illegible] (Cat e5 [illegible])	100	1000	1000Base-T Gigabit Ethernet
pair 4	Cat 6a [illegible] Cat 7 ([illegible]) (Cat 7	100	10000	10GBase-T 10-Gigabit Ethernet

[illegible] IEEE [illegible].

2.5GBase-T-2500 Mbps [illegible] Cat 5e [illegible].

5GBase-t-5000 Mbps [illegible] Cat 6 [illegible].

[illegible] Gigabit Ethernet [illegible] Gigabit Ethernet-10 [illegible] 10GBase-T [illegible] 1GBase-T [illegible] 100 [illegible] 10GBase-T [illegible] WAN [illegible].

[illegible]:
[illegible]
[illegible]:
[illegible]
[illegible]:
16:20 - 27/11/1398
[illegible]:
[illegible] - [illegible] - Twisted-Pair

[illegible]
[illegible]: https://www.shabakeh-mag.com/networking-technology/16301/%D8%A2%D8%B4%D9%86%D8%A7%DB%8C%DB%8C-%D8%A8%D8%A7-%DA%A9%D8%A7%D8%A8%D9%84-%D8%B2%D9%88%D8%AC-%D8%A8%D9%87-%D9%87%D9%85-%D8%AA%D8%A7%D8%A8%DB%8C%D8%AF%D9%87-twisted-pair