Thunderbolt Technology – How it

Thunderbolt pairs Intel's PCI Express interconn
DisplayPort on the same connector.

Type	Copper and optical fiber
Devices	Storage devices
Connector	Mini DisplayPort
Features	High speed transfer rate Bit rate : 10 Gbps Max length of cables : 100 mt Thunderbolt 2 : 20 Gbps Protocol : 4× PCI Express 2.0,[4] DisplayPort 1.1a
Pin out	
Other information	someone says that this cable is called "thunderbolt" for joking Usain Bolt, world record runner of 100 mt, because the data can run faster than him !

Pin 1	GND	Ground
Pin 2	HPD	Hot plug detect
Pin 3	HS0TX(P)	HighSpeed transmit 0 (positive)
Pin 4	HS0RX(P)	HighSpeed receive 0 (positive)
Pin 5	HS0TX(N)	HighSpeed transmit 0 (negative)
Pin 6	HS0RX(N)	HighSpeed receive 0 (negative)
Pin 7	GND	Ground
Pin 8	GND	Ground
Pin 9	LSR2P TX	LowSpeed transmit
Pin 10	GND	Ground (reserved)
Pin 11	LSP2R RX	LowSpeed receive
Pin 12	GND	Ground (reserved)
Pin 13	GND	Ground
Pin 14	GND	Ground
Pin 15	HS1TX(P)	HighSpeed transmit 1 (positive)
Pin 16	HS1RX(P)	HighSpeed receive 1 (positive)
Pin 17	HS1TX(N)	HighSpeed transmit 1 (negative)
Pin 18	HS1RX(N)	HighSpeed receive 1 (negative)
Pin 19	GND	Ground
Pin 20	DPPWR	Power

It transfers data in serial way, as we can see in the pinout table, with 4 couples of send and receive lines.