

10GBASE-T Pair Swap and Polarity (Register 1.145)

The Pair swap and polarity register reflects the status of the pair-to-pair connectivity between the PHYs and status of polarity on each individual pair.

Table 45-XX--10GBASE-T pair swap and polarity register bit definitions.

Bit(s)	Name	Description	R/W
1.145.15:12	Reserved	Value always 0, writes ignored	RO
1.145.11	Pair D polarity	1 = Polarity within pair D is reversed 0 = Polarity within pair D is not reversed	RO
1.145.10	Pair C polarity	1 = Polarity within pair C is reversed 0 = Polarity within pair C is not reversed	RO
1.145.9	Pair B polarity	1 = Polarity within pair B is reversed 0 = Polarity within pair B is not reversed	RO
1.145.8	Pair A polarity	1 = Polarity within pair A is reversed 0 = Polarity within pair A is not reversed	RO
1.145.7:6	Pair D connection	11 = Pair D is connected to pair D of the Link Partner 10 = Pair D is connected to pair C of the Link Partner 01 = Pair D is connected to pair B of the Link Partner 00 = Pair D is connected to pair A of the Link Partner	RO
1.145.5:4	Pair C connection	11 = Pair C is connected to pair D of the Link Partner 10 = Pair C is connected to pair C of the Link Partner 01 = Pair C is connected to pair B of the Link Partner 00 = Pair C is connected to pair A of the Link Partner	RO
1.145.3:2	Pair B connection	11 = Pair B is connected to pair D of the Link Partner 10 = Pair B is connected to pair C of the Link Partner 01 = Pair B is connected to pair B of the Link Partner 00 = Pair B is connected to pair A of the Link Partner	RO
1.145.1:0	Pair A connection	11 = Pair A is connected to pair D of the Link Partner 10 = Pair A is connected to pair C of the Link Partner 01 = Pair A is connected to pair B of the Link Partner 00 = Pair A is connected to pair A of the Link Partner	RO

Pair D polarity (1.145.11)

When read as a zero, bit 1.145.11 indicates that the polarity within pair D is not reversed. When read as a one, bit 1.145.11 indicates that the polarity within pair D is reversed.

Pair C polarity (1.145.10)

When read as a zero, bit 1.145.10 indicates that the polarity within pair C is not reversed. When read as a one, bit 1.145.10 indicates that the polarity within pair C is reversed.

Pair B polarity (1.145.9)

When read as a zero, bit 1.145.9 indicates that the polarity within pair B is not reversed. When read as a one, bit 1.145.9 indicates that the polarity within pair B is reversed.

Pair A polarity (1.145.8)

When read as a zero, bit 1.145.11 indicates that the polarity within pair A is not reversed. When read as a one, bit 1.145.11 indicates that the polarity within pair A is reversed.

Pair D connection (1.145.7:6)

Bits 1.145.7:6 describe the which pair of the Link Partner is connected to PHY's pair D.

Pair C connection (1.145.5:4)

Bits 1.145.7:6 describe the which pair of the Link Partner is connected to PHY's pair C.

Pair B connection (1.145.3:2)

Bits 1.145.7:6 describe the which pair of the Link Partner is connected to PHY's pair B.

Pair A connection (1.145.1:0)

Bits 1.145.7:6 describe the which pair of the Link Partner is connected to PHY's pair A.