**HDbaseT Products**

1. **HDbaseT solutions**

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| **Version** | **Chip** | **Performance** | **Cost** |
| HDbaseT 1.04K30@40m4K30@70m | VS010VS100  | 4K30@40m4K30@70m | Low cost |
| HDbaseT 2.04K30@100m | VS2000 | 4K30@100m | Middle cost |
| HDbaseT 3.04K60@40m4K60@100m | VS310VS3100 | 4K60@40m4K60@100m | Higher cost |

1. **HDbaseT Products**

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| **Extender** | **Solution**  | **Distance** | **Matrix and Switcher** | **Compatibility** |
| SSH70 ExtenderHDbaseT 1.0 + CSC | CSC: 444 to 420VS010 | 4K60@40m1080p@70m | **988 modular matrix:**2K-In: PCBA\_9VMC-IN-HDBT-70m4K-In: PCBA\_BVMC-IN-HDBT-40m2K-Out: PCBA\_9VMC-OUT-HDBT-70m4K-Out: PCBA\_BVMC-OUT-HDBT-40m**Q4K modular matrix:**4K-In: PCBA\_Q4K-IN-HDBT-4K40m4K-Out: PCBA\_Q4K-OUT-HDBT-4K40m**Switcher:** PS512, DMH32 | Yes with 3rd party |
| SSH100 ExtenderHDbaseT 1.0 + CSC | CSC: 444 to 420VS100 | 4K60@70m1080p@100m | **988 modular matrix:**2K-In: PCBA\_9VMC-IN-HDBT-100m4K-In: PCBA\_BVMC-IN-HDBT-70m2K-Out: PCBA\_Q2K-OUT-HDBT-2K100m4K-Out: PCBA\_BVMC-OUT-HDBT-70m**Q4K modular matrix:**4K-In: PCBA\_Q4K-IN-HDBT-4K70m4K-Out: PCBA\_Q4K-OUT-HDBT-4K70m**Switcher:** PS913, KVM913 (4K@100m version) | Yes with 3rd party |
| HDbaseT 2.0 + DSC | DSCVS2000 | 4K60@150m | **Switcher:** PS913, KVM913 (4K@150m version) | No |
| SSH18G40 ExtenderHDbaseT 3.0 | True 444, 18GbpsVS310 | 4K60@40m | **Q18G modular matrix:**18G-In: PCBA\_Q18G-IN-HDBT-4K40m18G-Out: PCBA\_Q18G-OUT-HDBT-4K40m | Yes with 3rd party |
| SSH18G100 ExtenderHDbaseT 3.0 | True 444, 18GbpsVS3100 | 4K60@100m | Q18G系列插卡式矩阵PCBA：18G-In: PCBA\_Q18G-IN-HDBT-4K100m18G-Out: PCBA\_Q18G-OUT-HDBT-4K100m | Yes with 3rd party |

1. **CSC, DSC**
	1. CSC = Color Space Conversion. 4:4:4 converts to 4:2:0 and vice versa.
		1. Low cost solution to support 4K 444@60Hz, compatible with 3rd party.

Colour Space Conversion (CSC) Technology in HDBaseT™

Due to the data rate of HDBaseT™ technology being capped at 10.2Gbps, it is unable to pass the latest native 4K UHD resolutions of 4K 60Hz 4:4:4. There is now a requirement to integrate video resolutions with data speeds up to 18Gbps across a multi-zone AV environment. Blustream have implemented CSC (Colour Space Conversion) technology into our latest products to ensure 4K HDR signals can now be supported over the limited infrastructure of HDBaseT™. Colour Space Conversion reduces the data rate of the HDMI signal by converting the colour space from 4:4:4 or 4:2:2 to a lower format. Within Colour Space Conversion technology the native resolution and frame rate remain constant from end to end. The only part of the signal that is converted during transmission is the colour. Blustream CSC products do not support HDR10+ or the dynamic variation of Dolby Vision due to the way these specific variations of dynamic HDR (dHDR) are encoded. These codecs transmit repeated metadata packets throughout the transmission of any media making it impossible at this stage to convert in the same way using CSC technology.

* 1. DSC = Digital Streaming Compression. 18Gbps (4K/60) compress down to 1080p and vice versa.
		1. Low cost solution to support 4K 444@60Hz, point to point transmission.
		2. DSC is promoted by VESA.
1. **HDbaseT chips**

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| **Feature** | **VS100** | **VS010** | **VS2310** | **VS210** | **VS2010** | **VS3000** | **VS3100** | **VS300** | **VS310** |
| Cable length[meters] | 1080P,100m 4K30,70m | 1080p,70m 4K30,40m | 4K30,100m | 1080P,70m 4K30,40m | 4K30,100m | 4K60,100m | 4K60,100m | 4K30,70m 4K60,40m | 4K30,70m 4K60,40m |
| Long Reach | Y | N | Y | N | Y | Y | Y | N | N |
| USB 2.0 | N | N | Y | Y | Y | Y | N | Y | N |
| Ethernet | 100M | N | 100M | 100M | N | 1G | 1G | N | N |