**HDbaseT Products**

1. **HDbaseT solutions**

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| **Version** | **Chip** | **Performance** | **Cost** |
| HDbaseT 1.0  4K30@40m  4K30@70m | VS010  VS100 | 4K30@40m  4K30@70m | Low cost |
| HDbaseT 2.0  4K30@100m | VS2000 | 4K30@100m | Middle cost |
| HDbaseT 3.0  4K60@40m  4K60@100m | VS310  VS3100 | 4K60@40m  4K60@100m | Higher cost |

1. **HDbaseT Products**

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| **Extender** | **Solution** | **Distance** | **Matrix and Switcher** | **Compatibility** |
| SSH70 Extender  HDbaseT 1.0 + CSC | CSC: 444 to 420  VS010 | 4K60@40m  1080p@70m | **988 modular matrix:**  2K-In: PCBA\_9VMC-IN-HDBT-70m  4K-In: PCBA\_BVMC-IN-HDBT-40m  2K-Out: PCBA\_9VMC-OUT-HDBT-70m  4K-Out: PCBA\_BVMC-OUT-HDBT-40m  **Q4K modular matrix:**  4K-In: PCBA\_Q4K-IN-HDBT-4K40m  4K-Out: PCBA\_Q4K-OUT-HDBT-4K40m  **Switcher:** PS512, DMH32 | Yes with 3rd party |
| SSH100 Extender  HDbaseT 1.0 + CSC | CSC: 444 to 420  VS100 | 4K60@70m  1080p@100m | **988 modular matrix:**  2K-In: PCBA\_9VMC-IN-HDBT-100m  4K-In: PCBA\_BVMC-IN-HDBT-70m  2K-Out: PCBA\_Q2K-OUT-HDBT-2K100m  4K-Out: PCBA\_BVMC-OUT-HDBT-70m  **Q4K modular matrix:**  4K-In: PCBA\_Q4K-IN-HDBT-4K70m  4K-Out: PCBA\_Q4K-OUT-HDBT-4K70m  **Switcher:** PS913, KVM913 (4K@100m version) | Yes with 3rd party |
| HDbaseT 2.0 + DSC | DSC  VS2000 | 4K60@150m | **Switcher:** PS913, KVM913 (4K@150m version) | No |
| SSH18G40 Extender  HDbaseT 3.0 | True 444, 18Gbps  VS310 | 4K60@40m | **Q18G modular matrix:**  18G-In: PCBA\_Q18G-IN-HDBT-4K40m  18G-Out: PCBA\_Q18G-OUT-HDBT-4K40m | Yes with 3rd party |
| SSH18G100 Extender  HDbaseT 3.0 | True 444, 18Gbps  VS3100 | 4K60@100m | Q18G系列插卡式矩阵PCBA：  18G-In: PCBA\_Q18G-IN-HDBT-4K100m  18G-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 |