## CSI How to get started

Quick reference on how to get started with CSI as a programmer



This document explains how you can start using Perception CSI.

**CSI** stands for **C**ustom **S**oftware Interface. You can use this interface as a programmer to extend and customize the Perception software program. The program is based on the Microsoft .NET technology; therefore CSI programs can only run on Microsoft operating systems and not on for example UNIX systems.

What do you need?

- Microsoft Visual Studio 2017 (or later) development environment. However you can also use the Microsoft Visual Community IDE, this product provides a free development environment. You can download this from the Microsoft web site
- You need the HBM CSI option to be enabled through the use of the HASP ® 4 USB Token.

This option is also listed as CSI: Custom Software Interface in the Perception menu: Help > About Perception > More... > Options page

More Abo	out Perception	2
Options	Module versions	
f.	Analysis: Allows entry of formulas to calculate math channels like SUM (Ch1+Ch2) or channel parameters like RMS (Ch1). Results can be reused in Analysis.	*
-	Advanced Reporting: Enables multi page custom reports to be generated using the internal Report sheet or MS-Word and templates. These reports may contain trace displays, user or cursor tables, pictures or user text.	e:
8	Information: Enter comments and extended user information in fully customize entry masks. Entered information is stored with the experiment data and can be used in reports, tables or the formula database.	d
-	CSI Runtime: Enables Custam Software extensions for Perception (created using the Perception CSI option) to be executed. These extension can be extra controls, sheets, formulas or others.	
1	STL: A set of special analysis routines according to the STL standards. Used in LV, MV and HV labs for analysis. Includes import of TDG (Test Data Generator) data for verification.	
1	HPHV AA: An automated analysis process for HV and MV switchgear testing. Covers NoLoad, Short Circuit, Capacitive and Synthetic test. Uses STL calculations and built-in logic to validate waveshapes.	
#	BE 256 / MultiPro control: Control a single BE256 or a single MultiPro mainframe via IEEE488 interface. Note: Only selected BE 256 / MultiPro input boards are supported.	
2	Sequencer: Creation/modification of timing sequences and communication with BE3200 Test Sequencer.	

- The Perception CSI template file name **Perception CSI Sheet project Template.vsix** This file can be found at the <u>HBM web site</u>. This template file will help you to create a c# frame work when you want to extend Perception with a new custom sheet. You can find more information about this template file in the CSI User manual.
- The CSI User manual called CSI Programming for GEN series.

## CSI How to get started





This user manual can be downloaded from the <u>HBM web site</u>. Section: **Operating Manuals**. The first chapter helps you to get started.

 Use the CSI help file PerceptionInterfaces.chm as a reference. This file can also be downloaded from the <u>HBM web site</u>. The file can be found in the CSI Help Files section and the name of the link is <u>Perception Interfaces</u>

This is all you need to get started. <u>The Perception API web</u> page gives you some more general information on CSI. As a programmer you should understand that you will create a DLL which will be dynamically loaded by Perception during start up. Your application will be an integral part of the Perception software and will be fully integrated into the Perception user interface.