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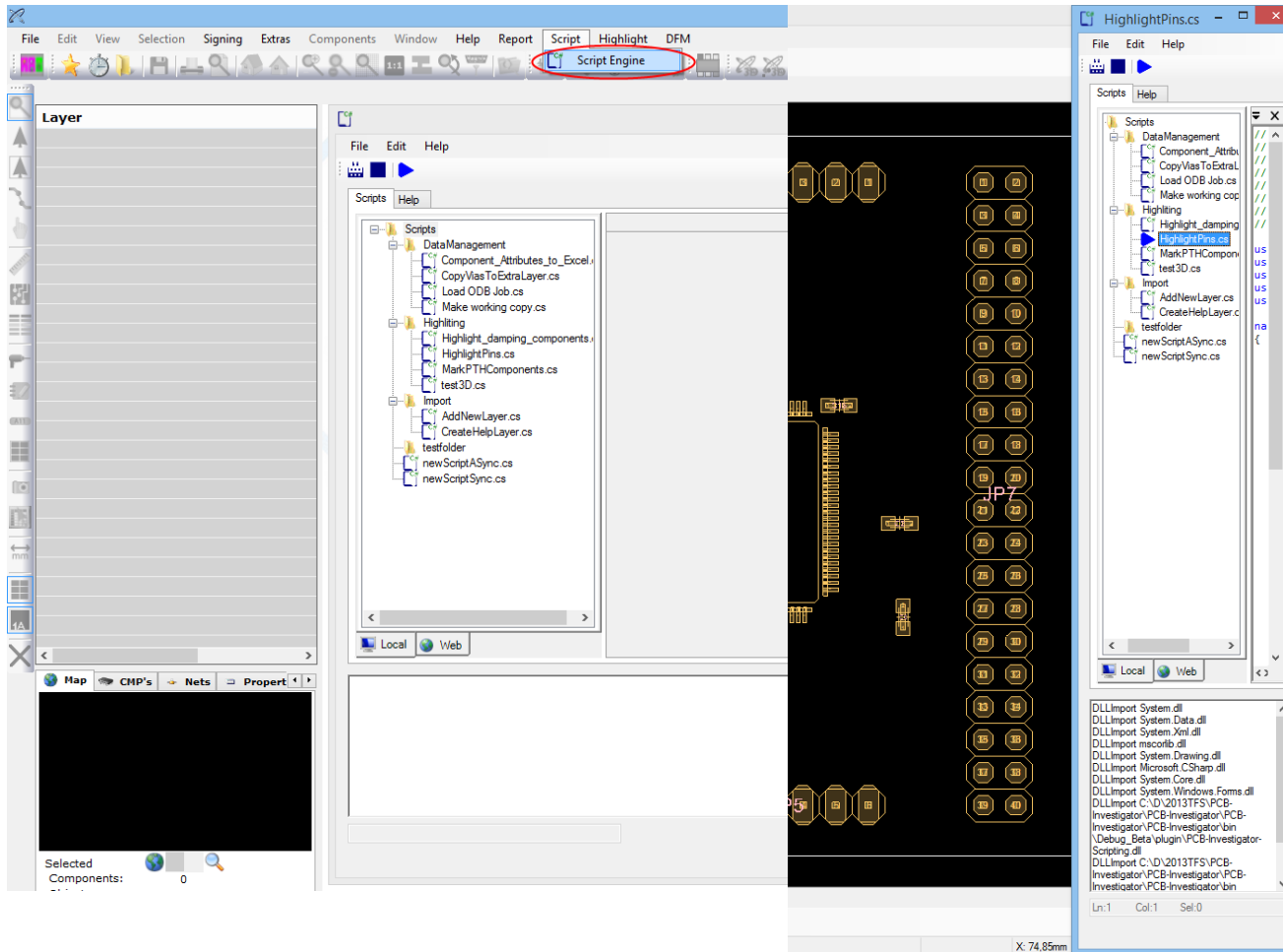
PCB-Investigator Scripting

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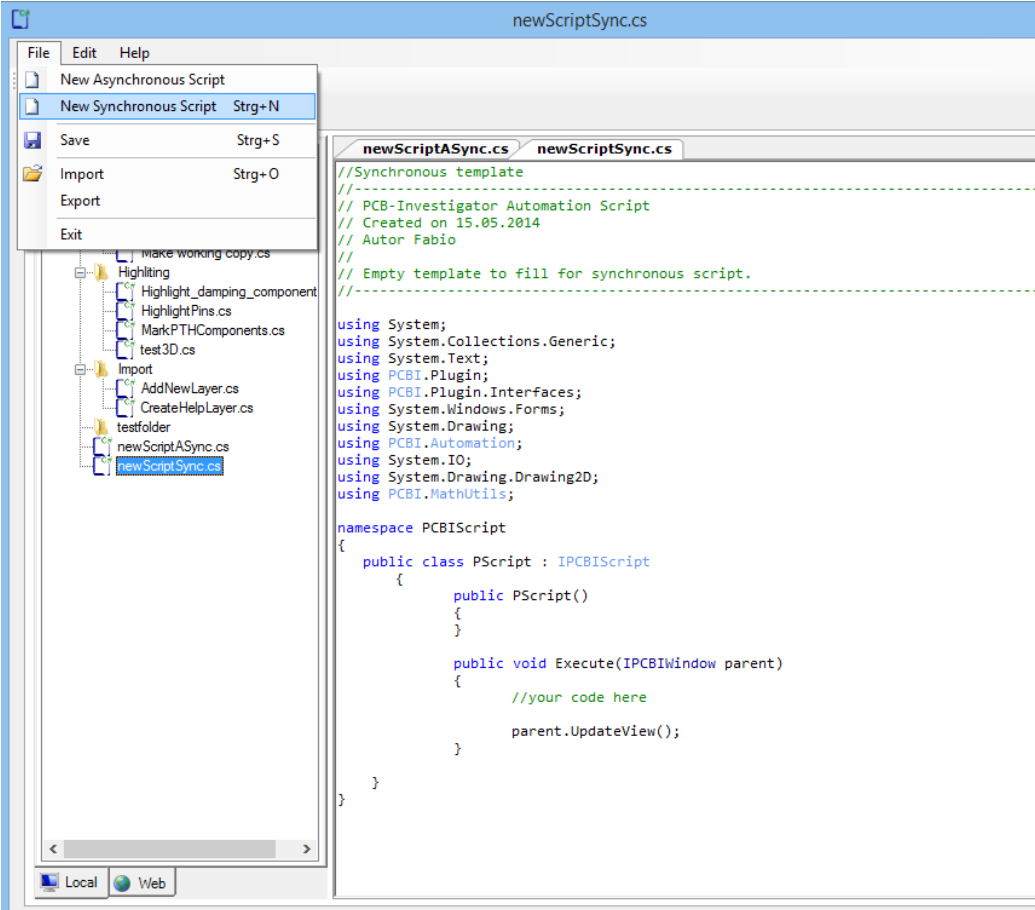
Wie benutzt man die PCB-Investigator Script Engine



PCB-Investigator Scripting-Engine hat sein eigenes Menü um es leicht zu finden.

Das Fenster kann in der Größe verändert werden, um es ohne Code-Seite nutzen zu können, neben dem Hauptfenster von PCB-Investigator.

Neue Skripts erstellen



```
newScriptSync.cs
File Edit Help
New Asynchronous Script
New Synchronous Script Strg+N
Save Strg+S
Import Strg+O
Export
Exit
make working copy.cs
Highlighting
Highlight_damping_component
HighlightPins.cs
MarkPTHComponents.cs
test3D.cs
Import
AddNewLayer.cs
CreateHelpLayer.cs
testfolder
newScriptASync.cs
newScriptSync.cs
Local Web

//Synchronous template
//-----
// PCB-Investigator Automation Script
// Created on 15.05.2014
// Autor Fabio
//-----
// Empty template to fill for synchronous script.
//-----

using System;
using System.Collections.Generic;
using System.Text;
using PCBII.Plugin;
using PCBII.Plugin.Interfaces;
using System.Windows.Forms;
using System.Drawing;
using PCBII.Automation;
using System.IO;
using System.Drawing.Drawing2D;
using PCBII.MathUtils;

namespace PCBIScript
{
    public class PScript : IPCBIScript
    {
        public PScript()
        {
        }

        public void Execute(IPCBIIWindow parent)
        {
            //your code here

            parent.UpdateView();
        }
    }
}
```

Es sind leere Vorlagen für synchrone oder asynchrone Skripts vorhanden.

Der Standardfall ist ohne threading, mit synchron Start. Dort können Sie alle Methoden der IAutomation Schnittstelle verwenden.

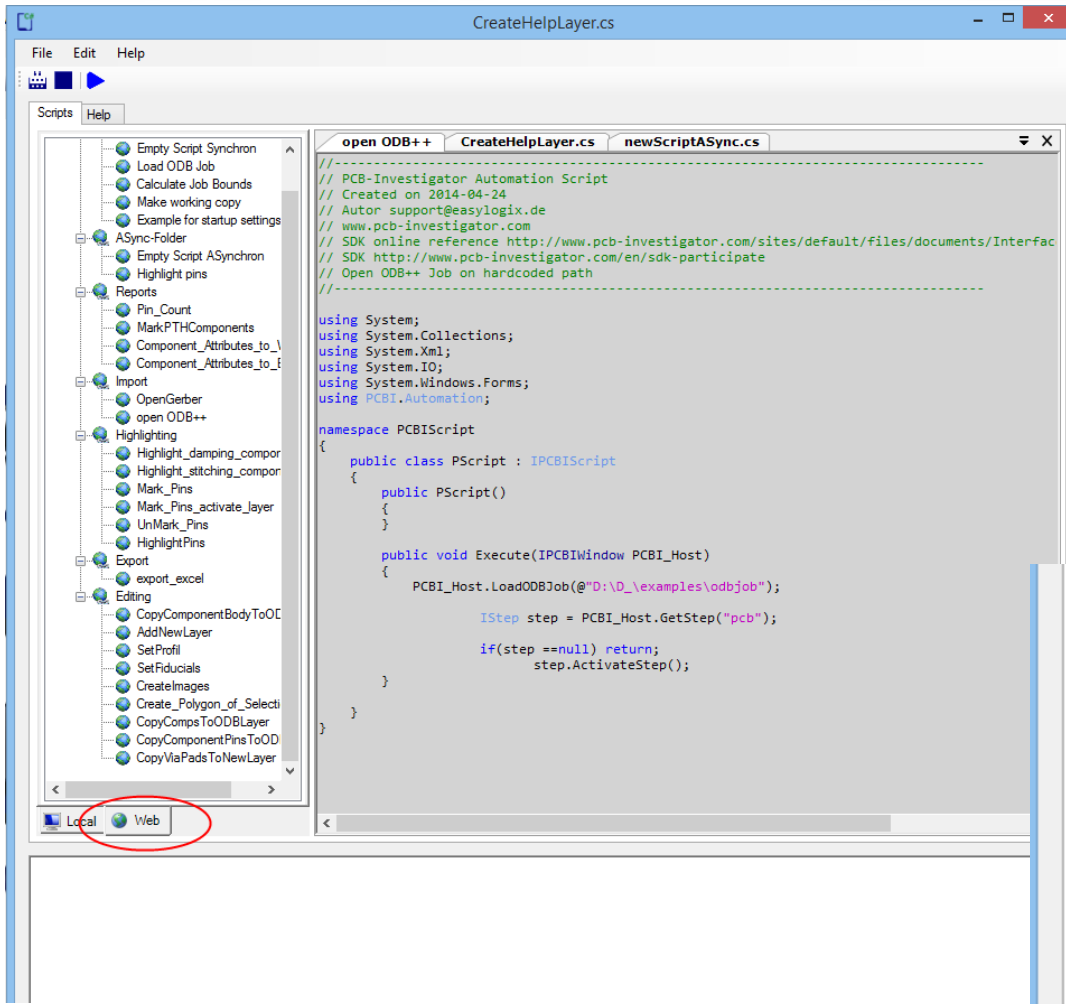
Für Details siehe:

<http://www.pcb-investigator.com/sites/default/files/documents/InterfaceDocumentation/Index.html>

Oder Beispiele:

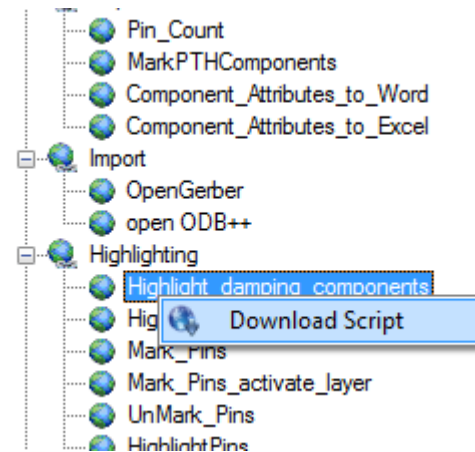
<http://www.pcb-investigator.com/de/plugins/pcbii-scripting>

Beispiele zum Download

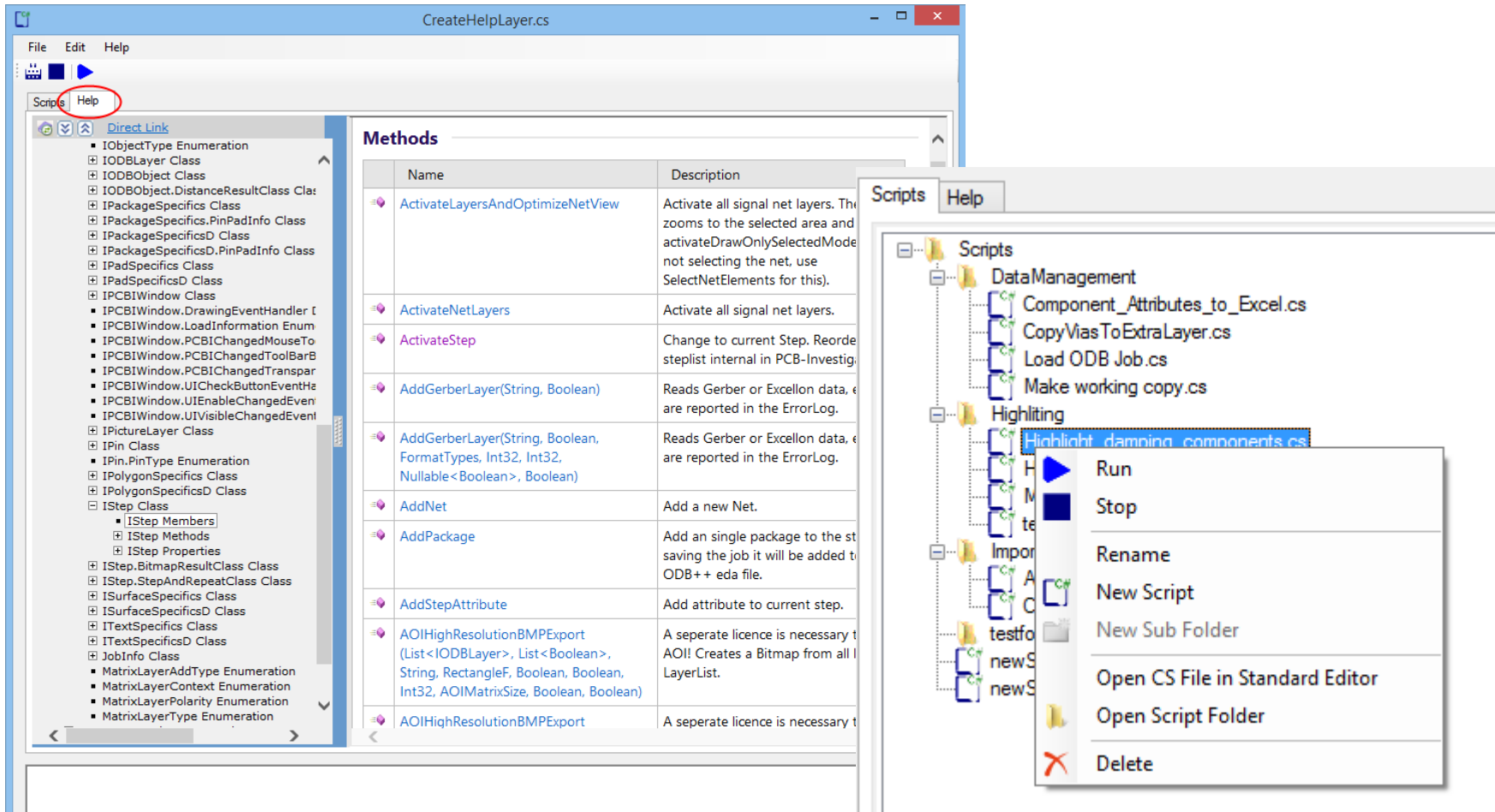


Es gibt viele Beispielskripte zum Download direkt im Skriptfenster. Einfach in der Web-Registerkarte das Kontextmenü mit der rechten Mausklick öffnen.

Es ist möglich Ihre lokalen Skripts per Drag-and-Drop zu verschieben oder neue Ordner mit dem Kontextmenü zu erstellen.



Online Hilfe



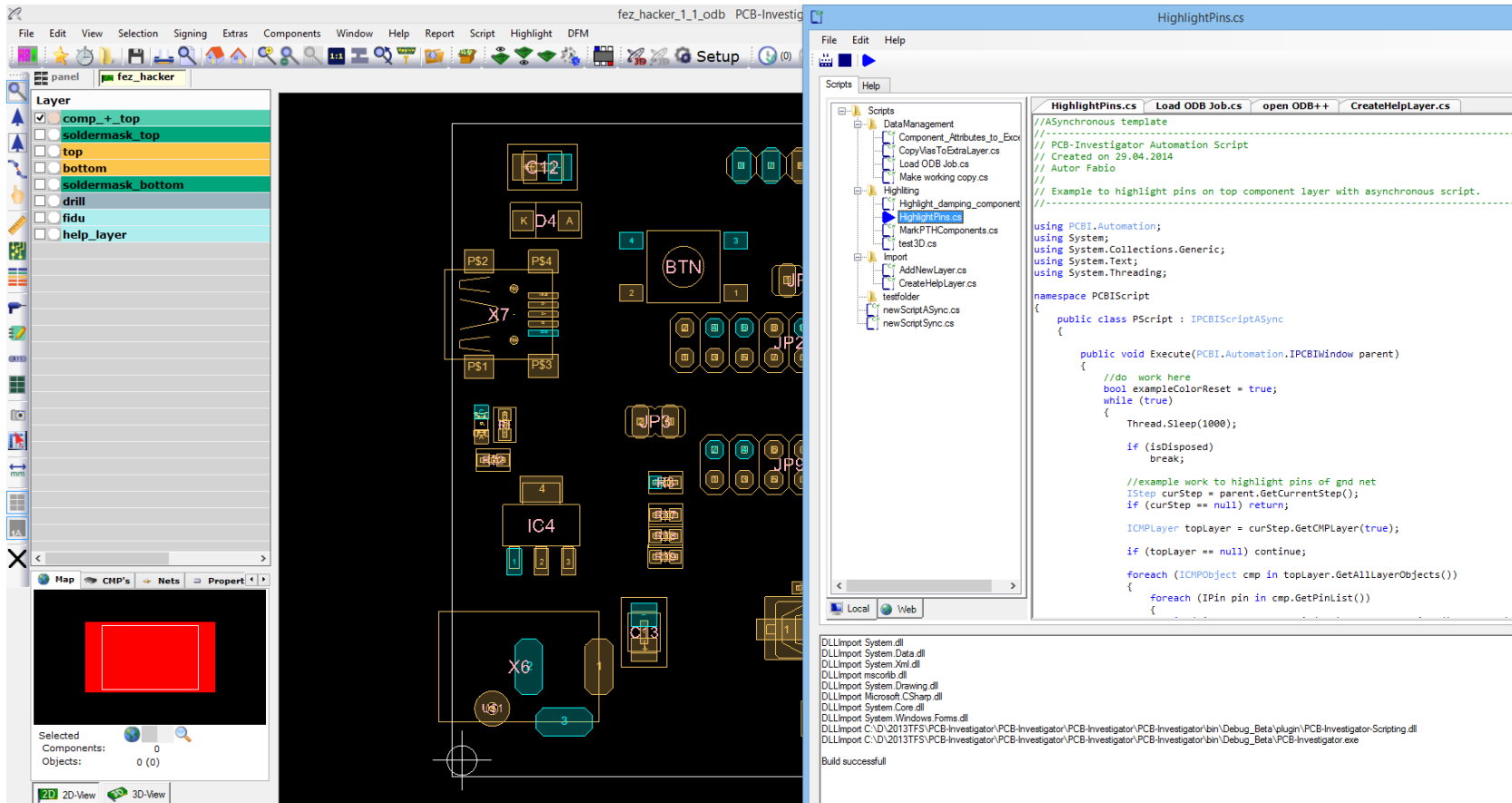
The screenshot displays the 'CreateHelpLayer.cs' application window. The 'Help' menu is highlighted in the top menu bar. The left sidebar shows a tree view of classes under 'Direct Link'. The main area is divided into two panes: 'Methods' and 'Scripts'. The 'Methods' pane contains a table with the following data:

Name	Description
ActivateLayersAndOptimizeNetView	Activate all signal net layers. This zooms to the selected area and activateDrawOnlySelectedMode not selecting the net, use SelectNetElements for this).
ActivateNetLayers	Activate all signal net layers.
ActivateStep	Change to current Step. Reorder steplist internal in PCB-Investig.
AddGerberLayer(String, Boolean)	Reads Gerber or Excellon data, are reported in the ErrorLog.
AddGerberLayer(String, Boolean, FormatTypes, Int32, Int32, Nullable<Boolean>, Boolean)	Reads Gerber or Excellon data, are reported in the ErrorLog.
AddNet	Add a new Net.
AddPackage	Add an single package to the st saving the job it will be added to ODB++ eda file.
AddStepAttribute	Add attribute to current step.
AOIHighResolutionBMPExport(List<IODBLayer>, List<Boolean>, String, RectangleF, Boolean, Boolean, Int32, AOIMatrixSize, Boolean, Boolean)	A separate licence is necessary t AOI! Creates a Bitmap from all LayerList.
AOIHighResolutionBMPExport	A separate licence is necessary t

The 'Scripts' pane shows a tree view of script files. A context menu is open over the 'Highlight_damning_components.cs' file, listing the following actions:

- Run
- Stop
- Rename
- New Script
- New Sub Folder
- Open CS File in Standard Editor
- Open Script Folder
- Delete

Paralleles arbeiten



The screenshot displays the PCB-Investigator software interface. The main window shows a PCB layout with various components like IC12, IC4, X7, X6, and buttons labeled with letters and numbers. A layer stackup is visible on the left, with 'comp_+ top' selected. The right-hand side shows a script editor with a C# script named 'HighlightPins.cs'. The script is designed to highlight pins on a specific component layer asynchronously. The script includes comments and code for asynchronous execution using a class that inherits from 'IPCBIscriptAsync'.

```
using PCBInvestigator.Automation;
using System;
using System.Collections.Generic;
using System.Text;
using System.Threading;

namespace PCBInvestigator
{
    public class PScript : IPCBIscriptAsync
    {
        public void Execute(PCBI.Automation.IPCBIWindow parent)
        {
            //do work here
            bool exampleColorReset = true;
            while (true)
            {
                Thread.Sleep(1000);

                if (IsDisposed)
                    break;

                //example work to highlight pins of gnd net
                IStep curStep = parent.GetCurrentStep();
                if (curStep == null) return;

                ICMPLayer topLayer = curStep.GetCMPLayer(true);
                if (topLayer == null) continue;

                foreach (ICMPObject cmp in topLayer.GetAllLayerObjects())
                {
                    foreach (IPin pin in cmp.GetPinList())
                    {

```

Mit extra Threads ist es möglich arbeiten im Hintergrund laufen zu lassen.

Import von dlls

```
using System.Collections;
using System.Xml;
using System.IO;
using System.Windows.Forms;
using PCBI.Automation;

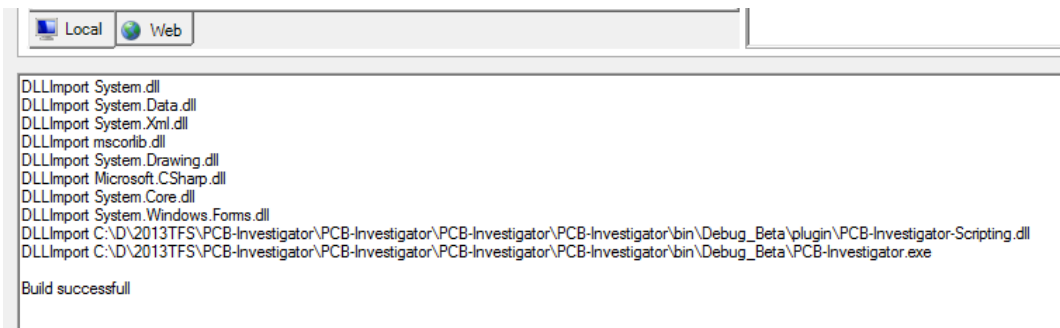
// DLLImport C:\Program Files (x86)\EasyLogix\PCB-Investigator-Beta\PlugIn\PCBI-3D-View.dll;

namespace PCBIScript
```

Mit folgendem Kommentar können Sie externe Bibliotheken (dlls) einbinden.

```
// DLLImport dll-Pfad
```

Der Compiler bindet die angegebenen Bibliotheken mit in das Skript ein. Sie können im Output Bereich überprüfen ob Ihre Dll korrekt gefunden und eingebunden wurde.



Informationen



Weitere Informationen online:

<http://www.pcb-investigator.com/de/plugins/pcbi-scripting>

<http://www.pcb-investigator.com/sites/default/files/documents/InterfaceDocumentation/Index.html>

<http://www.pcb-investigator.com/de/forum/sdk-samples>

Sie können uns für Fragen auch direkt erreichen:

<mailto:support@easylogix.de>