# ECAD Symbol Editor (ESE) Quick Start Guide V1.0

The ECAD Symbol Editor has been developed by SamacSys to provide users of our services with a quick and easy way to rearrange the pins on any symbol to suit their design needs. The ECAD Symbol Editor (ESE) gives engineers full control of the symbol pin positioning (Left, Right, Top, Bottom). ECAD Symbols can be downloaded directly from within the ESE application or from manufacturer and supplier websites around the world (by way of \*.epw files that can be opened in ESE). The ECAD Symbol Editor is available free of charge, look out for the ESE icon:



Having placed the pins as required, the uploaded version of the model can then be downloaded from <a href="https://componentsearchengine.com/">https://componentsearchengine.com/</a> into any of the supported ECAD tool formats:



#### **Downloading the ESE Application**

The ECAD Symbol Editor can be downloaded from <a href="https://componentsearchengine.com/ga/downloads.php">https://componentsearchengine.com/ga/downloads.php</a>

When you first launch ESE, it will check for your login details from Library Loader. If you do not have Library Loader installed, you will be presented with the following dialog to login or register for our services.

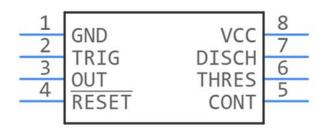
ECAD Symbol Ec	ditor	
Email (User Na	ame)	
	Not Registere	d?
Password		
	Forgot Passw	ord?
	Close	Login

During this guide we are going to use the following example from having performed a search on <a href="https://componentsearchengine.com/ga/">https://componentsearchengine.com/ga/</a> for a NE555D

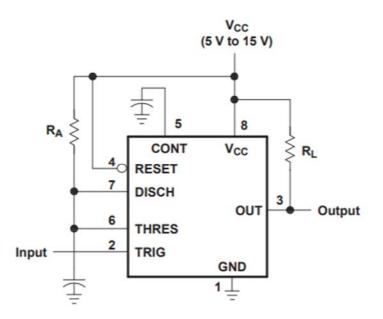
### NE555D - Texas Instruments

Download PCB Footprints and Schematic Symbols - FREE NE555D - Texas Instruments - Image | Symbol | PCB Footprint | 3D Models GND VCC 7 TRIG DISCH 6 OUT THRES 4 5 RESET CONT Click to zoom Click to zoom Click to view in 3D

This is how the default symbol looks on our site prior to download:



This is how we would like the pins to be arranged on the symbol:



There are 2 ways to start the process, you can either Open a \*.epw file for the part you have downloaded or Find a Part directly from within the ECAD Symbol Wizard.

### Opening a Part from a EPW File (Sample can be downloaded from here)

Click the Open button.

	٩	∧ ∨		æ	-	+	↑	Ŧ	î	÷	ŧ	₽	5	不	⊠ ★		۵	U
Open		Ascend Descend	Туре	Auto	Left	Right		Bottom		Down	Flip	Add Space	Remove	Upload Symbol	Friends Feedback			Quick Start
St	art	Sort	Prepare		Assign	Symbol	Pin Side			1	Move Pin	ns		Export	Share	About	Account	Help

Select the \*.epw file that has been extracted from the downloaded zip and then click Import. These will be typically found on our partners websites.

🛣 Locate EPW File									×
← → • ↑ 🖣	→ Thi	s PC > Downloads		√ Ö	Sea	rch Downl	oads		Q
Organize 🔻 Ne	ew folde	r							?
🖈 Quick access	^	Name	^		Date mo	odified	Туре		
Quick access		NE555D.epw			28/08/2	018 15:17	EPW	File	
🔣 Microsoft Exce	el								
i OneDrive									
💻 This PC									
🧊 3D Objects									
📃 Desktop									
🔮 Documents									
🕂 Downloads									
👌 Music									
Pictures									
📕 Videos	~	<							>
	File <u>n</u> a	me: NE555D.epw			~ EP	W Files (*.e	epw)		$\sim$
				Too <u>l</u> s	•	Import		Cancel	

## Finding a Part

Click "Find Part" from the ECAD Symbol Editor ribbon



Select the Manufacturer, enter the Manufacturer Part Number, and then click Search.

ECAD Symbol Editor	×
1. Select Manufacturer	
Texas Instruments 🔹	
<ol> <li>Enter Manufacturer Part Number (can be partial without SN74) then dick the Search button</li> </ol>	wildcards e.g.
NE555D	Search
3. Select Manufacturer Part Number then dick OK	
<b>Y</b>	OK

Check/Select the returned Manufacturer Part Number and then click OK.

ECAD Symbol Editor		$\times$
1. Select Manufacturer		
Texas Instruments 🔹		
2. Enter Manufacturer Part Number (can be partial without SN74) then click the Search button	wildcards e.g.	
NE555D	Search	
3. Select Manufacturer Part Number then dick OK		
NE555D	ОК	
NE555D		
NE555DE4		
NE555DG4		
NE555DR		
NE555DRE4		
NE555DRG4		

This will download the part, and you will see the pin information presented in tabular form on the "Template" sheet. By default, half of the pins will be on the **Left** and half of the pins will be on the **Right**. This is denoted by the colour of the cell in the Fracture column.

	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	1	GND	Ground	0	0	1
3	Fracture-A	2	TRIG	Undefined	0	0	2
4	Fracture-A	3	OUT	Output	0	0	3
5	Fracture-A	4	*RESET	Undefined	0	0	4
6	Fracture-A	5	CONT	Undefined	0	0	5
7	Fracture-A	6	THRES	Undefined	0	0	6
8	Fracture-A	7	DISCH	Undefined	0	0	7
9	Fracture-A	8	VCC	Power	0	0	8

#### **Reordering Columns**

If you wish to reorder any of the columns, first click the column heading.

	А	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	8	VCC	Power	0	0	8
3	Fracture-A	7	DISCH	Undefined	0	0	7
4	Fracture-A	6	THRES	Undefined	0	0	6
5	Fracture-A	5	CONT	Undefined	0	0	5
6	Fracture-A	4	*RESET	Undefined	0	0	4
7	Fracture-A	3	OUT	Output	0	0	3
8	Fracture-A	2	TRIG	Undefined	0	0	2
9	Fracture-A	1	GND	Ground	0	0	1

Then click the Ascend or Descend buttons



## **Changing Pin Types**

Select the pins in the Type column that you wish to change.

	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	8	VCC	Power	0	0	8
3	Fracture-A	7	DISCH	Undefined	0	0	7
4	Fracture-A	6	THRES	Undefined	- 0	0	6
-5	Fracture-A	5	CONT	Undefined	0	0	5
6	Fracture-A	4	*RESET	Undefined	0	0	4
7	Fracture-A	3	OUT	Output	0	0	3
8	Fracture-A	2	TRIG	Undefined	0	0	2
9	Fracture-A	1	GND	Ground	0	0	1

Then click the Type button.

E 9.	∧ ∨	+	⇔	-	->	↑	Ŧ	↑	÷	\$	₽	5	₹	×	×		2	0
Open Find Part	Ascend Descend	Туре	Auto	Left	Right	Тор	Bottom	Up	Down	Flip	Add Space		Upload Symbol	Friends	Feedback	SamacSys	User Details	Quick Start
Start	Sort	Prepare		Assign	Symbol	Pin Side			1	Move Pi	ns		Export	St	hare	About	Account	Help

Select the desired Pin Type and then click OK.

•
ncel

	А	В	С	D	E	F	G	
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.	
2	Fracture-A	8	VCC	Power	0	0	8	
3	Fracture-A	7	DISCH	Undefined	0	0	7	
4	Fracture-A	6	THRES	Input	<b>-</b> 0	0	6	
5	Fracture-A	5	CONT	Undefined	0	0	5	
6	Fracture-A	4	*RESET	Input	0	0	4	
7	Fracture-A	3	OUT	Output	0	0	3	
8	Fracture-A	2	TRIG	Input	0	0	2	
9	Fracture-A	1	GND	Ground	0	0	1	

## **Assigning Symbol Pin Sides**

This can be done automatically with a number of options. Click the Auto button.

	٩	∧ ∨	+	æ	-	->	↑	Ŧ	♠	₽	\$	₽	5	₹	⊠ ★		۵	U
Open	Find Part	Ascend Descend		Auto				Bottom	Up	Down	Flip	Add Space	Remove	Upload Symbol	Friends Feedbac		User Details	Quick Start
Star	t	Sort	Prepare		Assign	Symbol	Pin Side			1	Move Pin	15		Export	Share	About	Account	Help

Select the desired option, and then click OK.

Assign Symbol Pin Side	$\times$
Auto Pin Side per Fracture	
C Left/Right	
C Left/Right (Alternate)	
C Left/Bottom/Right/Top	
Type Based Input(Left)/Output(Right)Power(Top)/Ground(Bottom)	
OK Cancel	

The Template sheet is processed by colouring the pins in the Fracture column i.e. **bLue** for **Left** pins, **bRown** for **Right** pins, **Red** for **Top** pins and **Green** for **Bottom** pins.

	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	5	CONT	Bidirectional	0	0	5
3	Fracture-A	1	GND	Ground	0	0	1
4	Fracture-A	6	THRES	Input	0	0	6
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	7	DISCH	Output	0	0	7
8	Fracture-A	3	OUT	Output	0	0	3
9	Fracture-A	8	VCC	Power	0	0	8

You can also interactively change pin side by selecting them from the Fracture column.

	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	5	CONT	Bidirectional	0	0	5
3	Fracture-A	1	GND	Ground	0	0	1
4	Fracture-A	6	THRES	Input	0	0	6
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	7	DISCH	Output	0	0	7
8	Fracture-A	3	OUT	Output	0	0	3
9	Fracture-A	8	VCC	Power	0	0	8

Then clicking the appropriate Left, Right, Top or Bottom buttons.



	А	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	5	CONT	Bidirectional	0	0	5
3	Fracture-A	[ 1	GND	Ground	0	0	1
4	Fracture-A	6	THRES	Input	0	0	6
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	7	DISCH	Output	0	0	7
8	Fracture-A	3	OUT	Output	0	0	3
9	Fracture-A	8	VCC	Power	0	0	8

#### **Moving Pins Up and Down**

Select a pin from the Fracture column.

	А	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	5	CONT	Bidirectional	0	0	5
3	Fracture-A	1	GND	Ground	0	0	1
4	Fracture-A	6	THRES	Input	0	0	6
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	7	DISCH	Output	0	0	7
8	Fracture-A	3	OUT	Output	0	0	3
9	Fracture-A	8	VCC	Power	0	0	8

Then click the Up or Down button.



	А	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	5	CONT	Bidirectional	0	0	5
3	Fracture-A		GND	Ground	0	0	1
4	Fracture-A	4	*RESET	Input	0	0	4
5	Fracture-A	6	THRES	Input	0	0	6
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	7	DISCH	Output	0	0	7
8	Fracture-A	3	OUT	Output	0	0	3
9	Fracture-A	8	VCC	Power	0	0	8

## **Flipping Pins**

Select a group of pins from the Fracture column.

	A	B	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	4	*RESET	Input	0	0	4
3	Fracture-A	7	DISCH	Undefined	0	0	7
4	Fracture-A	6	THRES	Input	0	0	6
5	Fracture-A	2	TRIG	Input	0	0	2
6	Fracture-A	3	OUT	Output	0	0	3
7	Fracture-A	5	CONT	Bidirectional	0	0	5
8	Fracture-A	8	VCC	Power	0	0	8
9	Fracture-A	1	GND	Ground	0	0	1

Then click the Flip button.

E	٩	∧ ∨		⇔	+	+	↑	÷	1	₽	ŧ	₽	5	不	×	*		2	0
Open	Find Part	Ascend Descend	Туре					Bottom									SamacSys		Quick Start
Sta	art	Sort	Prepare		Assign	Symbol F	Pin Side	-		1	Move Pir	15		Export	S	hare	About	Account	Help

The selected pins will then be flipped (reversed order).

1	A	B	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	2	TRIG	Input	0	0	2
3	Fracture-A	6	THRES	Input	0	0	6
4	Fracture-A	7	DISCH	Undefined	0	0	7
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	3	OUT	Output	0	0	3
7	Fracture-A	5	CONT	Bidirectional	0	0	5
8	Fracture-A	8	VCC	Power	0	0	8
9	Fracture-A	1	GND	Ground	0	0	1

## Adding and Removing Spaces

Select a pin under which you want to and a Space.

	A	B	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	2	TRIG	Input	0	0	2
3	Fracture-A			Input	0	0	6
4	Fracture-A	7	DISCH	Undefined	0	0	7
5	Fracture-A	4	*RESET	Input	0	0	4
6	Fracture-A	3	OUT	Output	0	0	3
7	Fracture-A	5	CONT	Bidirectional	0	0	5
8	Fracture-A	8	VCC	Power	0	0	8
9	Fracture-A	1	GND	Ground	0	0	1

Then click the Add Space button.



A <SPACE> row will be added under the selected pin.

1	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	2	TRIG	Input	0	0	2
3	Fracture-A	6	THRES	Input	0	0	6
4	Fracture-A		<space></space>	>			
5	Fracture-A	7	DISCH	Undefined	0	0	7
6	Fracture-A	4	*RESET	Input	0	0	4
7	Fracture-A	3	OUT	Output	0	0	3
8	Fracture-A	5	CONT	Bidirectional	0	0	5
9	Fracture-A	8	VCC	Power	0	0	8
10	Fracture-A	1	GND	Ground	0	0	1

To remove a Space, select a <SPACE> row from the Fracture column.

	A	B	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	2	TRIG	Input	0	0	2
3	Fracture-A	6	THRES	Input	0	0	6
4	Fracture-A		<space:< td=""><td>&gt;</td><td></td><td></td><td></td></space:<>	>			
5	Fracture-A			Undefined	0	0	7
6	Fracture-A	4	*RESET	Input	0	0	4
7	Fracture-A	3	OUT	Output	0	0	3
8	Fracture-A	5	CONT	Bidirectional	0	0	5
9	Fracture-A	8	VCC	Power	0	0	8
10	Fracture-A	1	GND	Ground	0	0	1

Then click the Remove Space button.

	٩	∧ ∨	+	⇔	+	+	↑	Ŧ	1	₽	\$	₽	5	₹	⊠ ★		2	U
Open	Find Part	Ascend Descend	Туре	Auto						Down		Add	Remove		Friends Feedback			Quick Start
St	Start Sort Prepare Assign Symbol Pin Side				Move Pins					Export	Share	About	Account	Help				

al.	A	В	С	D	E	F	G	
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.	
2	Fracture-A	2	TRIG	Input	0	0	2	
3	Fracture-A	6	THRES	Input	0	0	6	
4	Fracture-A	7	DISCH	Undefined	0	0	7	
5	Fracture-A	4	*RESET	Input	0	0	4	
6	Fracture-A	3	OUT	Output	0	0	3	
7	Fracture-A	5	CONT	Bidirectional	0	0	5	
8	Fracture-A	8	VCC	Power	0	0	8	
9	Fracture-A	1	GND	Ground	0	0	1	

# **Uploading Edited Symbol**

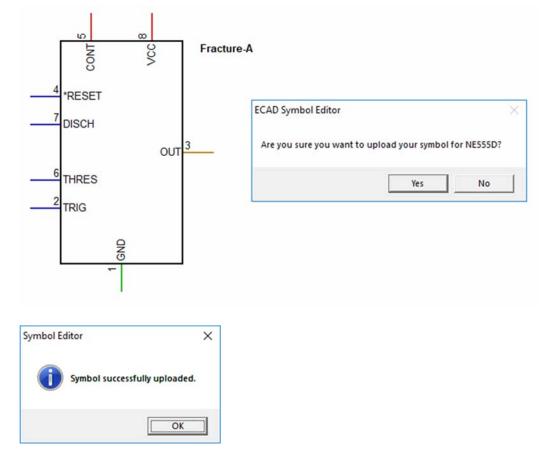
Once you have made all the necessary adjustments to the symbol pins.

1	A	В	С	D	E	F	G
1	Fracture	Number	Name	Туре	Swap	Bank	Seq.
2	Fracture-A	4	*RESET	Input	0	0	4
3	Fracture-A	7	DISCH	Undefined	0	0	7
4	Fracture-A		<space< td=""><td>&gt;</td><td></td><td></td><td></td></space<>	>			
5	Fracture-A	6	THRES	Input	0	0	6
6	Fracture-A	2	TRIG	Input	0	0	2
7	Fracture-A	1	GND	Ground	0	0	1
8	Fracture-A		<space< td=""><td>&gt;</td><td></td><td></td><td></td></space<>	>			
9	Fracture-A	ſ	<space< td=""><td>&gt;</td><td></td><td></td><td></td></space<>	>			
10	Fracture-A	3	OUT	Output	0	0	3
11	Fracture-A	5	CONT	Bidirectional	0	0	5
12	Fracture-A		<space< td=""><td>&gt;</td><td></td><td></td><td></td></space<>	>			
13	Fracture-A	8	VCC	Power	0	0	8

Click the Upload Symbol button.



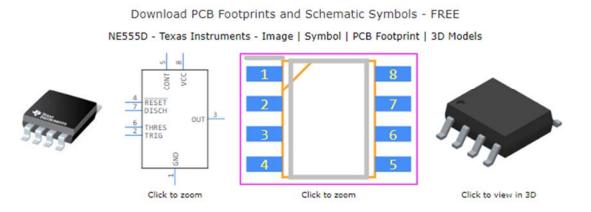
A preview of the edited symbol will be shown before you decide to upload by clicking Yes.



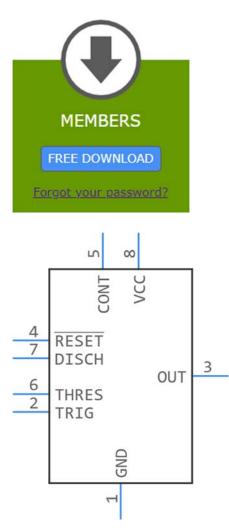
#### Reviewing and Downloading your edited Symbol into your chosen ECAD Tool

If you now refresh the browser on the original download page, you will see your edited symbol

## NE555D - Texas Instruments



This can now be downloaded in the normal way to get it into your chosen ECAD Tool.



#### **Tell your Friends**

Click the Friends button to send an email about the ECAD Symbol Editor to your friends and colleagues.



## Provide Feedback

Click the Feedback button to let us know what you think of our service. All comments welcome, as they will be used to help us improve our services.

E	٩	∧ ∨	+	æ	+	+	t	Ŧ	t	₽	ŧ	₽	5	₹	⊠ ★		2	U
Open	Find Part	Ascend Descend	Туре	Auto	Left	Right		Bottom	Up	Down	Flip	Add	Remove Space	Upload Symbol	Friends Feedback	SamacSys	User Details	Quick Start
Start		Sort	Prepare		Assign Symbol Pin Side						Move Pi	ns		Export	Share	About	Account	Help

### Find out more about SamacSys

Click the SamacSys button to find out more about us.



#### **Review User Details**

Click the User Details to review your login credentials.



## **Open Quick Start Guide**

To open this guide online, click the Quick Start button.

