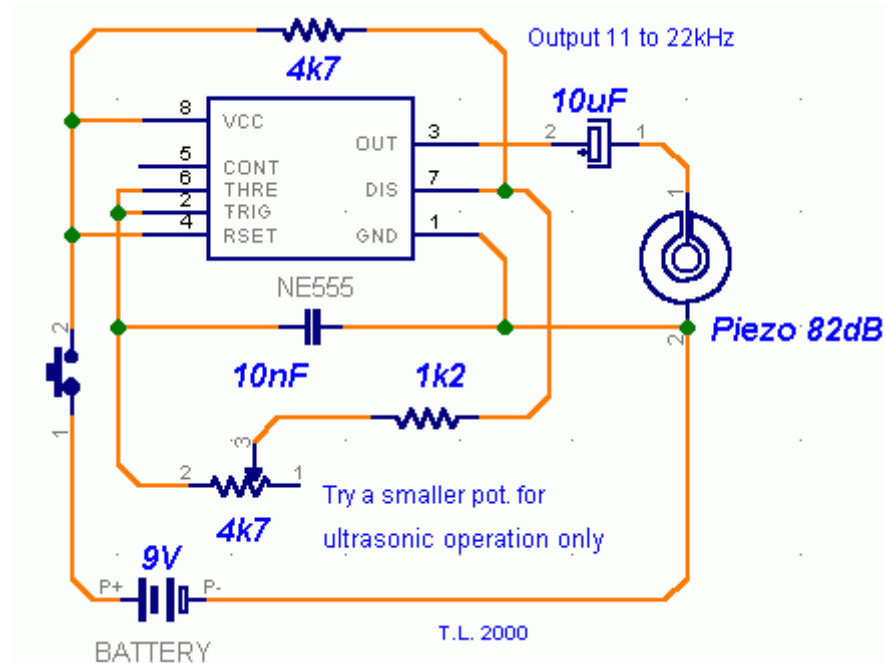


# ELECTRO SCHEMATICS

( / )

Advertisement

Home (<https://www.electroschematics.com/>) » Tested (<https://www.electroschematics.com/category/tested/>) » Ultrasonic Dog Repeller Circuit



(<https://www.electroschematics.com/wp-content/uploads/2008/04/electronic-dog-repeller.gif?fit=444%2C334>)

## Ultrasonic Dog Repeller Circuit

P. MARIAN ([HTTPS://WWW.ELECTROSCHEMATICS.COM/AUTHOR/ADMIN/](https://www.electroschematics.com/author/admin/))

[repellents \(/tag/repellent-circuits\)](#) [ultrasonic \(/tag/ultrasonic-circuits\)](#)

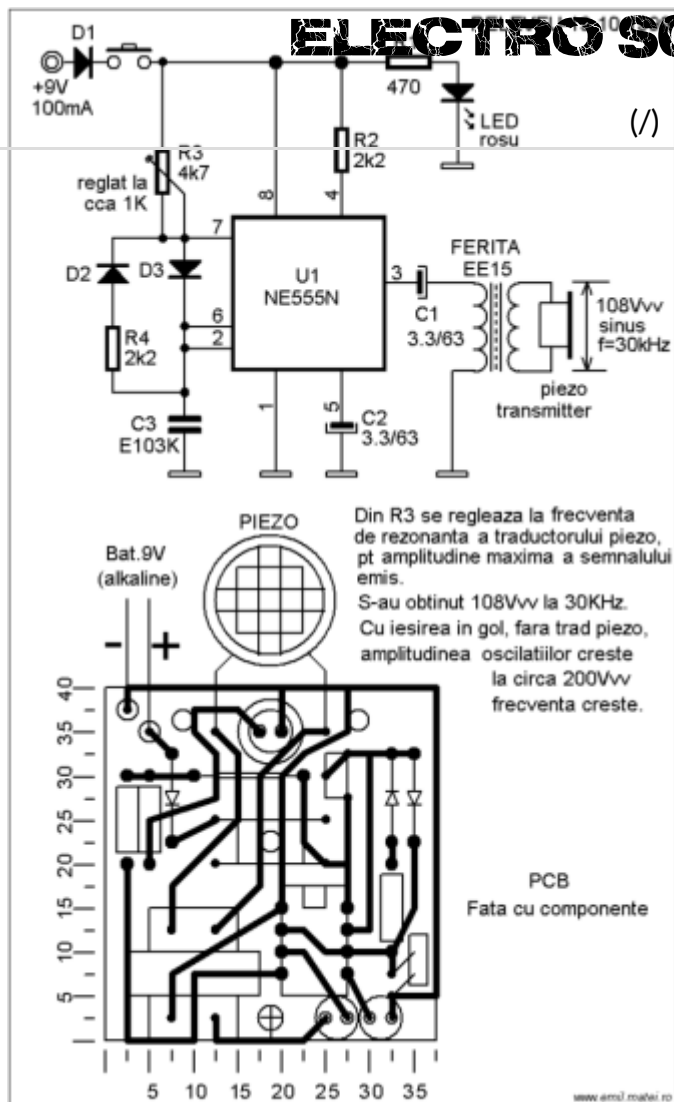
This ultrasonic dog repeller circuit will chase away angry dogs. It is build with the all known 555 circuit, a buzzer and a little ferrite transformator. The ultrasonic frequency must be set with a dog nearby.

### Dog Repeller Schematic no 1

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

[Cookie Settings](#)

[Accept All](#)



(<https://www.electroschematics.com/wp>

-content/uploads/2008/04/ultrasonic-dog-repeller.png)

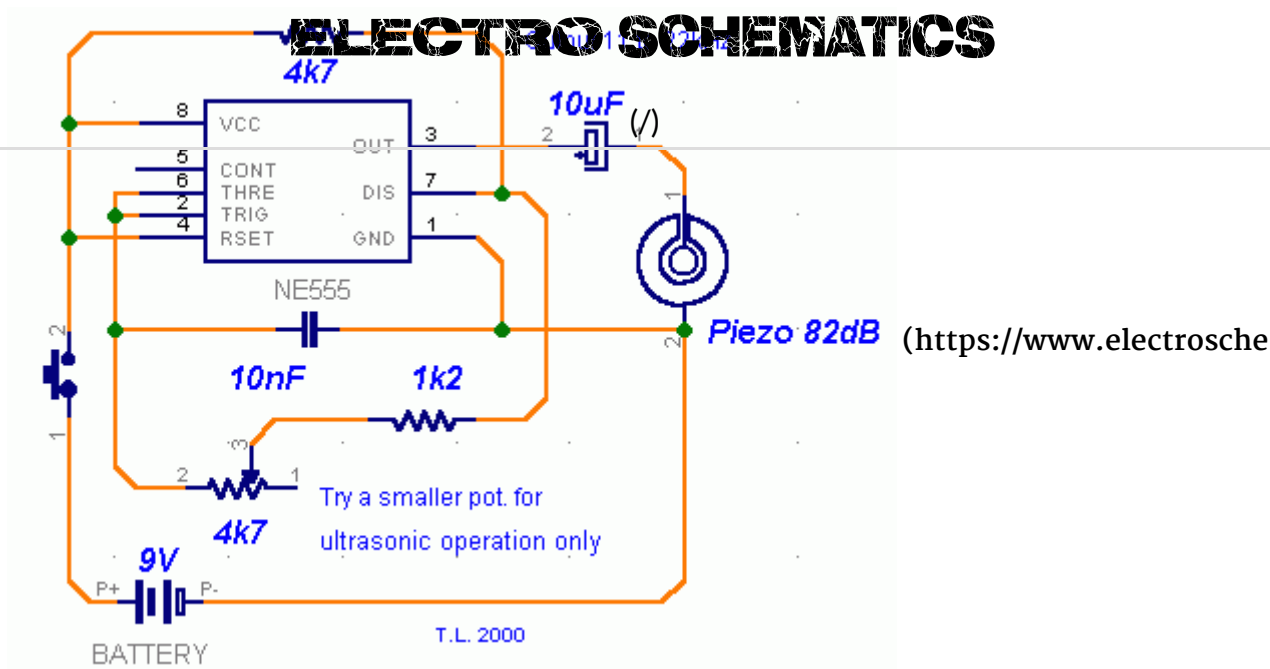
Circuit number 1 uses the well known NE555 IC, couple of components and a EE15 ferrite transformer. Adjust R3 at resonance frequency of the piezo transducer for maximum amplitude of the repeller ultrasonic sound. At 30 KHz this can reach a value of 108 V<sub>pp</sub>. Without the piezo the output voltage is around 200 V<sub>pp</sub>.

## Dog Repeller Schematic no 2

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

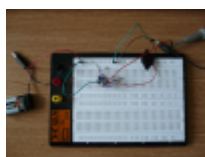
[Cookie Settings](#)

[Accept All](#)

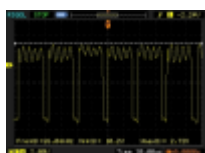


<https://www.electroschematics.com/wp-content/uploads/2008/04/electronic-dog-repeller.gif?resize=444%2C334>

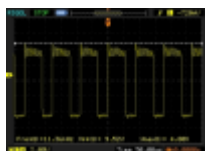
## breadboard and oscilloscope screen captures



<https://www.electroschematics.com/wp-content/uploads/2008/04/dog-repellent-breadboard.jpg>



<https://www.electroschematics.com/wp-content/uploads/2008/04/oscilloscope-capture-1.jpg>



<https://www.electroschematics.com/wp-content/uploads/2008/04/oscilloscope-capture-2.jpg>

I have replaced the 10nF capacitor with a 6.8nF one so it can cover a frequency range between 11kHz and 25kHz, but in your case it might work with the 10nF.

The output voltage has a value of 10Vpp and the buzzer is a passive one (without generator) and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

[Cookie Settings](#)

[Accept All](#)

# Dog Repellent **ELECTRO SCHEMATICS**

(/)



555 datasheet (<https://www.electroschematics.com/lm555-datasheet/>)

Next

The Simplest Electronic  
Door Code Lock Circuit



(<https://www.electroschematics.com/electronic-door-lock/>)

## Related Tutorials

Electronic Dog Repellent Circuit (<https://www.electroschematics.com/electronic-dog-repellent-dog-chaser-schematic/>)

Dog Repellent Project Circuit (<https://www.electroschematics.com/dog-repellent-circuit/>)

## Recent posts

- Haptic or Vibration motors – A Quick Look  
(<https://www.electroschematics.com/haptic-motor/>)
- Seeeduino Xiao – First Look (<https://www.electroschematics.com/arduino-2/>)
- MPPT Solar Charge Controllers (<https://www.electroschematics.com/controller/>)
- Aquarium lights intro (<https://www.electroschematics.com/lights/>)
- DIY Subsea Light (<https://www.electroschematics.com/subsea-light/>)

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

[Cookie Settings](#)

[Accept All](#)

**ELECTRO SCHEMATICS****21 Comments**

( / )

Join the conversation!

You must be logged in (<https://www.electroschematics.com/log-in/>) to post a comment.

☐ Check this checkbox to get notifications of followup comments via e-mail.  
You can also subscribe (<https://www.electroschematics.com/comment-subscriptions/?srp=6&srk=49917252f13a91d5fee07d5bb551175c&sra=s&srsrsrc=f>) without commenting.



shrikant

this circuit can also use for the birds repellent?

Posted on December 15th 2015 | 7:11 pm (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1879001>)

◀ Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



shibil

i made circuit#2.....

when i turn up the variable resister full the buzzer is act like a RADIO ..

I didn't get 6.8nf cap... i only got 10nf  
plz help me to fix this 😊

Posted on September 12th 2015 | 5:35 pm (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1795276>)

◀ Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.



Cookie Settings

Accept All

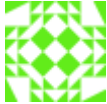
Ludmil

Hi!

I need one like this system. I need it to be able to make the dog angry when the dog barks.

Posted on June 19th 2015 | 5:20 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1716464>)

← Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



waqar

i want to know schematic #1 about transformer. plz help me

Posted on January 19th 2015 | 7:04 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1458291>)

← Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



nes

may i know how to solve the formula in the schematic #2

Posted on January 18th 2015 | 9:43 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1456823>)

← Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



nes

i want to know how to get the frequency

Posted on January 18th 2015 | 11:17 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-1456902>)



We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

Can i use the circuit to a rat? If i was able to change the freq to annoy the rats.

[Cookie Settings](#)
[Accept All](#)

Posted on January 14th 2015 | 6:47 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comment-123165>)

# ELECTRO SCHEMATICS

Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



## Creativiky

Hi Popescu,

I love this site. Loads of cool projects to learn from. In the above circuit I was not able to find which piezo/ultrasonic transducer are you using. Can you please respond with the part number/or a link from where we can buy it?

Thanks. Keep up the good work. Cheers.

Posted on November 30th 2014 | 9:39 pm (<https://www.electroschematics.com/run-dog-angry-dog-chaser/#comment-1229232>)

Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



## Waleed Rishmawi

thank you for sharing this with us. does it actually work because I am trying to build one? what kid of power switch did you use with this because I can see it connected to power pin and the rest pin. thanks and looking forward to hearing your answers. thanks

Posted on October 11th 2014 | 9:14 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/#comment-898333>)

Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



## pooya

hi

could u tell me which piezo used in this circuit ?

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All" you consent to the use of ALL the cookies.

However, you may visit "Cookie Settings" to provide a controlled consent.

Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))

Cookie Settings

Accept All

# ELECTRO SCHEMATICS



michaeleric

(/)

circuit #1

C3 E103K

i understand "C3" is "capacitor 3", but what is "E103K"?

i google "E103K" and come up what part of a part number.

Posted on January 03rd 2014 | 3:58 am (<https://www.electroschematics.com/run-dog-angry-dog-chaser/#comment-274481>)

◀ Log in to Reply ([https://www.electroschematics.com/wp-login.php?redirect\\_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F](https://www.electroschematics.com/wp-login.php?redirect_to=https%3A%2F%2Fwww.electroschematics.com%2Frun-dog-angry-dog-chaser%2F))



heena

103K ohms it means

100 E means 100 ohms

Posted on January 04th 2014 | 3:20 pm (<https://www.electroschematics.com/run-dog-angry-dog-chaser/#comment-274656>)



View More

(<https://www.electroschematics.com/run-dog-angry-dog-chaser/comment-page-2/#comments>)

Login

Email

Password

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

Cookie Settings

Accept All



Register (<https://www.electroschematics.com/register>) | Lost your password? (<https://www.electroschematics.com/lostpassword>)

**ELECTRO SCHEMATICS**

(/)

## Latest Article Comments

**Car Battery Charger with... (<https://www.electroschematics.com/car-battery-charger-with-transistors/#li-comment-1903920>)**

"If you are using your AC powerline to substitute for the tranformer... and you want to use a"

**Single Pushbutton Run-Stop... (<https://www.electroschematics.com/single-pushbutton-run-stop-circuit/#li-comment-1903918>)**

"I think R9 needs to be corrected to a 1k not 10k. At a 12v supply a 10k will limit I to a point the"

**Review of the HW-687 DC Motor Control...**

(<https://www.electroschematics.com/review-of-the-hw-687-dc-motor-control-module/#li-comment-1903917>)

"baicai: Thanks for your response. Now I am little bit confused so share the link of CSM5350"

**HW-585 PC CPU Fan Speed... (<https://www.electroschematics.com/fan-speed-controller/#li-comment-1903916>)**

"Antonio Marcheselli: Good to know."

**Review of the HW-687 DC Motor Control...**

(<https://www.electroschematics.com/review-of-the-hw-687-dc-motor-control-module/#li-comment-1903915>)

"Hi, Hareendran, This "cryptic" 5V linear regulator chip marked as M5350B is a low-power,"

**View More ()**

Advertisement

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

[Cookie Settings](#)

[Accept All](#)



(/)

(<https://www.facebook.com/groups/electroschematics/>)

## Recent Posts

- Haptic or Vibration motors – A Quick Look (<https://www.electroschematics.com/haptic-motor/>)
- Seeeduino Xiao – First Look (<https://www.electroschematics.com/arduino-2/>)
- MPPT Solar Charge Controllers (<https://www.electroschematics.com/controller/>)
- Aquarium lights intro (<https://www.electroschematics.com/lights/>)
- DIY Subsea Light (<https://www.electroschematics.com/subsea-light/>)

## Most Popular Tags

IC Datasheet (<https://www.electroschematics.com/tag/ic-datasheet-circuits/>)

LED (<https://www.electroschematics.com/tag/led-circuits/>)

Audio Amplifier (<https://www.electroschematics.com/tag/audio-amplifier-circuits/>)

Arduino (<https://www.electroschematics.com/tag/arduino/>)

Battery Chargers (<https://www.electroschematics.com/tag/battery-charger-circuits/>)

741 (<https://www.electroschematics.com/tag/741-circuits/>)

Fm Transmitters (<https://www.electroschematics.com/tag/fm-transmitter-circuits/>)

Solar Chargers (<https://www.electroschematics.com/tag/solar-charger-circuits/>)

AVR Tutorial (<https://www.electroschematics.com/tag/avr-tutorial/>)

LDR (<https://www.electroschematics.com/tag/ldr-circuits/>)

Arduino Tutorial (<https://www.electroschematics.com/tag/arduino-tutorial/>)

Led Flashers (<https://www.electroschematics.com/tag/led-flasher-circuits/>)

4060 (<https://www.electroschematics.com/tag/4060-circuits/>)

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

Water (<https://www.electroschematics.com/tag/water/>)

Cookie Settings Accept All Top 10 (<https://www.electroschematics.com/tag/top-10-circuits/>)

Relay (<https://www.electroschematics.com/tag/relay/>)

## ELECTRO SCHEMATICS

USB (<https://www.electroschematics.com/tag/usb-circuits/>)

(/)

Automotive (<https://www.electroschematics.com/tag/automobile/>)

Light Switches (<https://www.electroschematics.com/tag/light-switch/>)

Advertisement

### ASPCORE NETWORK

#### PRODUCTS:

Electronic Products

(<https://www.electronicproducts.com/>)

Datasheets (<https://www.datasheets.com/>)

TechOnline (<https://www.techonline.com/>)

#### NEWS & ANALYSIS:

EE Times (<https://www.eetimes.com/>)

EE Times Europe (<https://www.eetimes.eu/>)

Power Electronic News

(<https://www.powelectronicsnews.com/>)

EPSNews (<https://epsnews.com/>)

Elektroda.pl (<https://www.elektroda.pl/>)

The Channelist (<https://thechannelist.com/>)

#### DESIGN:

EDN (<https://www.edn.com/>)

Electronics-Tutorials (<https://www.electronics-tutorials.ws/>)

Planet Analog

(<https://www.planetanalog.com/>)

Embedded (<https://www.embedded.com/>)

We use cookies on our website to give you the most relevant experience by remembering your

Electronics and we plan to improve our website by using cookies. By clicking "Accept All Cookies", you agree to the use of ALL the cookies.

However, you may visit "Cookie Settings" to provide a controlled consent.

[know-how.com/](https://www.know-how.com/))

#### TOOLS:

EEWEB (<https://www.eeweb.com/>)

PartSim (<https://www.partsim.com/>)

Product Advisor (<http://www.transim.com/iot/>)

Schematics.com

(<https://www.schematics.com/>)

Schematics.io (<http://www.schematics.io/>)

Engage (<https://www.transim.com/Products/Engage>)

IOT Design Zone (<http://iotdesign-zone.com>)

## GLOBAL NETWORK

## FOR ADVERTISERS

**ELECTRO SCHEMATICS**EE Times Asia (<https://www.eetasia.com/>)Contact Sales (<https://aspencore.com/contact/>)EE Times China (<http://www.eet-china.com/>)

Media Guide Request

EE Times India (<https://www.eetindia.co.in/>)(<https://aspencore.com/media-guide-request/>)EE Times Taiwan (<https://www.eettaiwan.com/>)EE Times Japan (<http://eetimes.jp/>)EDN Asia (<https://www.ednasia.com/>)

## CONNECT WITH US

EDN Taiwan (<https://www.edntaiwan.com/>)

Facebook

ESM China (<http://www.esmchina.com/>)(<https://www.facebook.com/aspencoregroup/>)EDN China (<http://www.ednchina.com/>)Twitter (<https://twitter.com/AspenCoreGroup>)EDN Japan (<http://ednjapan.com/>)(<https://aspencore.com/>)All contents are Copyright © 2022 by AspenCore, (<http://www.aspencore.com/>)Inc. All Rights Reserved.

[Contact Us \(https://aspencore.com/contact-us/\)](https://aspencore.com/contact-us/)
[About Us \(https://aspencore.com/\)](https://aspencore.com/)
[Privacy Policy \(https://aspencore.com/privacy-policy/\)](https://aspencore.com/privacy-policy/)  
[Terms of Use \(https://aspencore.com/terms-of-use/\)](https://aspencore.com/terms-of-use/)
[Site Map \(/sitemap.xml\)](/sitemap.xml)

We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking "Accept All", you consent to the use of ALL the cookies. However, you may visit "Cookie Settings" to provide a controlled consent.

[Cookie Settings](#)[Accept All](#)