



# Introducing **The Freescale Cup EMEA 2015**

## Information, deadlines and registration

Flavio Stiffan | University Programs EMEA

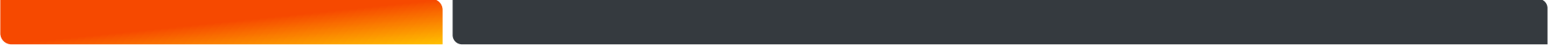
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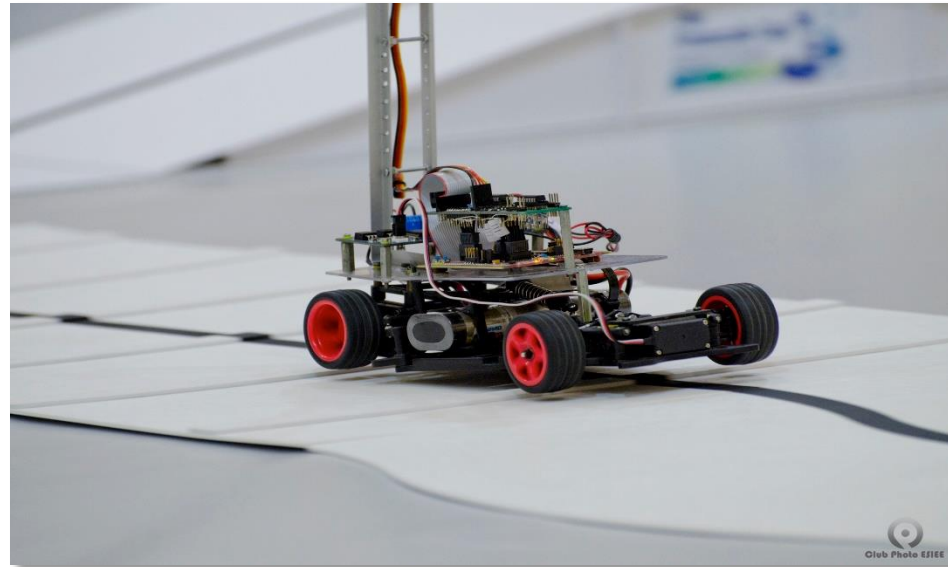
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- 
- The Freescale Cup: Introduction
  - A look at 2014
  - The 2015 Challenges
    - High School Challenge
    - The Freescale Cup
    - The Innovation Challenge
  - Challenges chronology
  - Support structure
  - Call for Action
  - Contact information



**freescale**<sup>™</sup> | Intelligent  
**Cup** | Car Racing





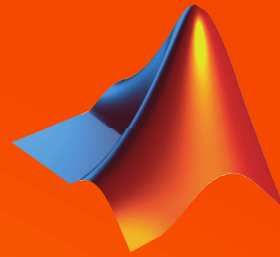
[The Freescale Cup Opening - Fraunhofer IIS Channel](#)

[Freescale Cup Finals Fraunhofer IIS Movie](#)



# Our Sponsors

**ARM**<sup>®</sup>



**MathWorks**<sup>®</sup>



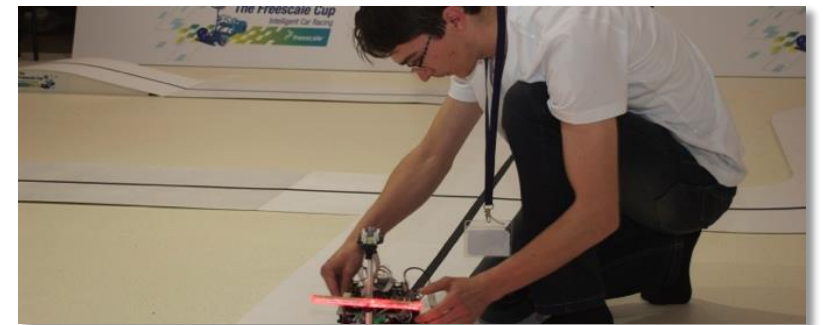
**Fraunhofer**

**IIS**



# The Freescale Cup in EMEA and in the World

- Global student challenge with over 33,000 students enrolled each year
- 4<sup>th</sup> running season in EMEA
- Promote real life engineering challenges
- Focusing on Embedded application design for low power requirements
- Drive creativity and teamwork spirit
- Create experience for internship and career start
- International student exposure through regional and international events





# The Freescale Cup 2014 – Pure Success!!!!



484 students  
143 teams  
50 universities  
16 countries

6 Qualifications  
87 Teams

75 students  
24 teams  
20 universities  
11 countries

# The Freescale Cup EMEA 2015 Challenges

## High School Challenge

Pilot Program

- High School Students
- Supported by local Universities
- Focus on initial programming with mbed and MATLAB
- 1-lap race
- Winner based on speed only
- Center lane track

## The Freescale Cup

- Bachelor Students with max 1 Master student/team
- Focus on C+ programming with MATLAB and CodeWarrior
- 1-lap race
- Winner based on speed only
- Edge lane track

## Innovation Cup

Pilot Program Start October 2014

- Open to all students
- All Freescale Architectures
- All programming tools
- Multiple lap race with color cues
- Winner based on combination of speed and power consumption
- Edge lane track



# The Freescale Cup EMEA 2015 Hardware

## High School Challenge and Freescale Cup

- 2 Brush Motors
- Servo for steering
- CMOS Line Scan camera (128-bit)
- Freescale MCU:
  - FRDM-KL25Z Cortex M0+ with Motor Interface Shield (standard in shipment)
  - TRK-MPC5606B Qorivva Power Architecture
- 50% discount on additional Freescale Hardware

## Innovation Challenge

- 1 Brush motor with cooling air system
- Servo for steering
- CCD color camera
- All Freescale architectures 32-bit and above including multicore
- Free MCU board (Tower, TRK and Freedom)
- 50% discount on additional Freescale Hardware

# The Freescale Cup Race Tracks



## High School Challenge – Center Lane Track

- Start/Stop
- Hill/Bumps/Chicane and Tunnel



## Freescale Cup and Innovation Challenge – Edge Lane Track

- Start/Stop
- Hill/Bumps/Chicane and Tunnel

Track Information: <https://community.freescale.com/docs/DOC-1092>

# 2015 Freescale Cup Events

Italy

France

Russia

Eastern  
Europe

Romania

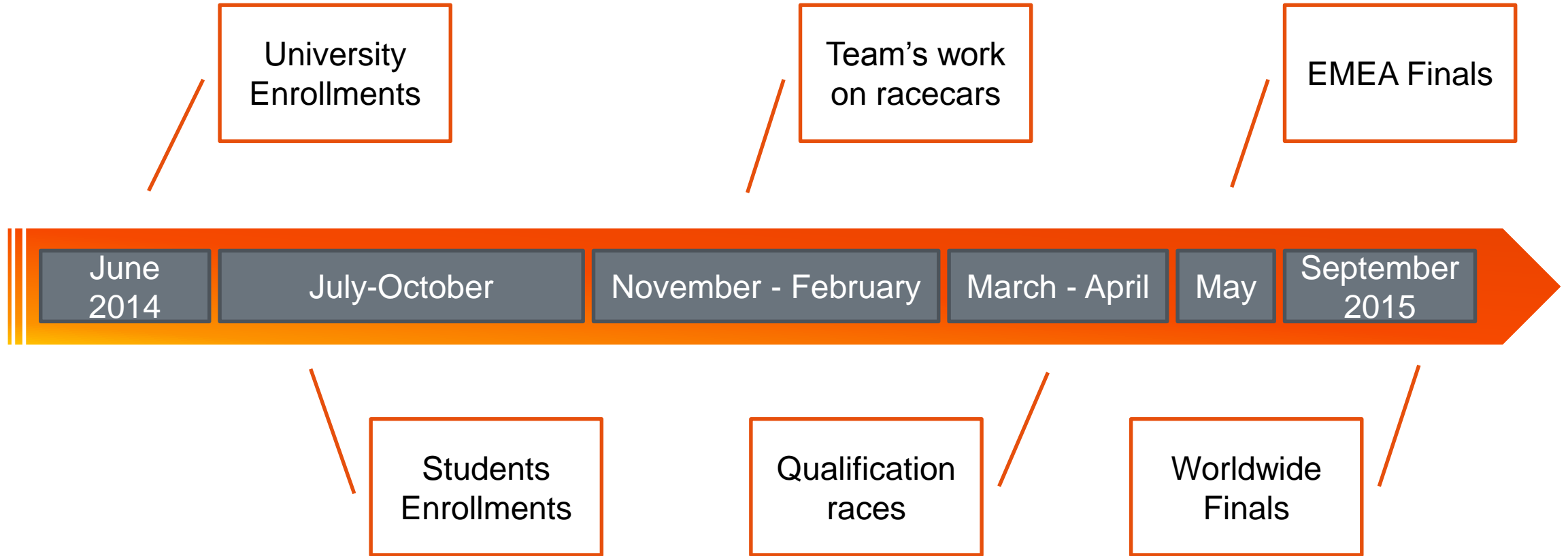
N. Africa

EMEA Finals

Worldwide Finals

Note: Freescale Cup events will include High School and Innovation Challenges for selected regions

# Events Chronology



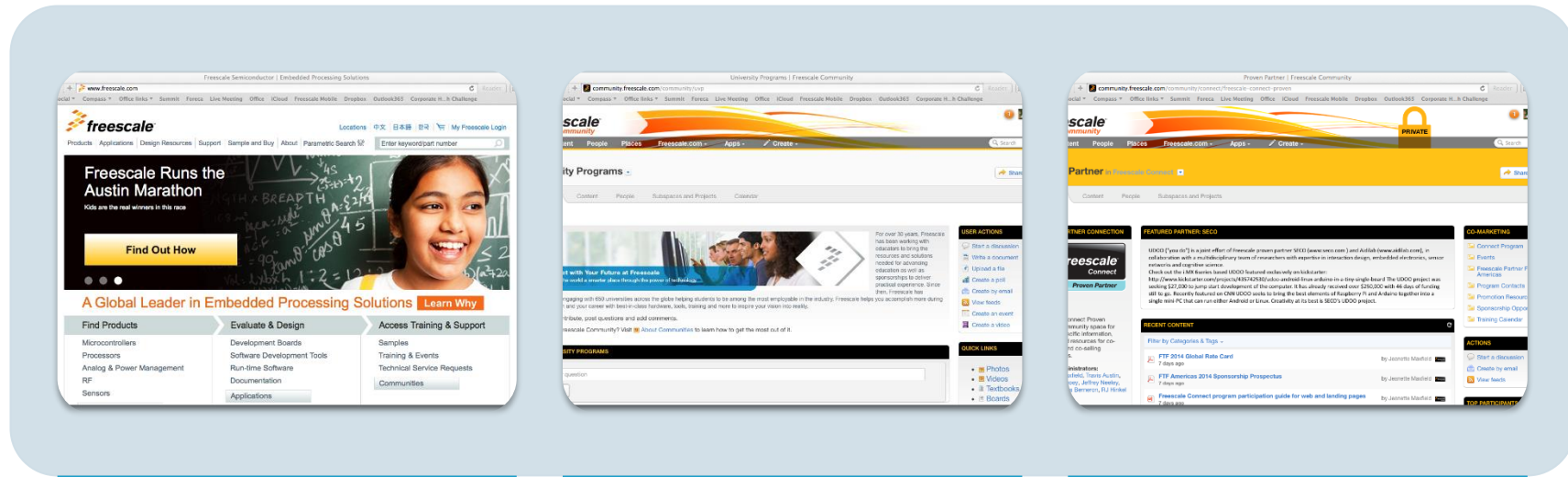
# Signing up

- Freescale Cup at Universities
  - Contact your regional University Programs support team
    - Eastern Europe: Ivan Skalka – [ivan.skalka@Freescale.com](mailto:ivan.skalka@Freescale.com)
    - UK: Derek Beattie – [derek.beattie@Freescale.com](mailto:derek.beattie@Freescale.com)
    - Israel: Shlomo Greenberg – [Shlomo.Greenberg@Freescale.com](mailto:Shlomo.Greenberg@Freescale.com)
    - Romania: Bogdan Costinescu – [bogdan.costinescu@Freescale.com](mailto:bogdan.costinescu@Freescale.com)
    - All other countries: Flavio Stiffan – [Flavio.stiffan@Freescale.com](mailto:Flavio.stiffan@Freescale.com)
- Pilot Programs High schools and Innovation Cup
  - Flavio Stiffan – [Flavio.stiffan@Freescale.com](mailto:Flavio.stiffan@Freescale.com)





# Support Structure



Samples  
Buy Direct  
Parametric  
Search

Freescale  
Cup  
EcoCar  
CodeWarrior  
Product  
communities

Software  
and  
Hardware  
Ecosystem



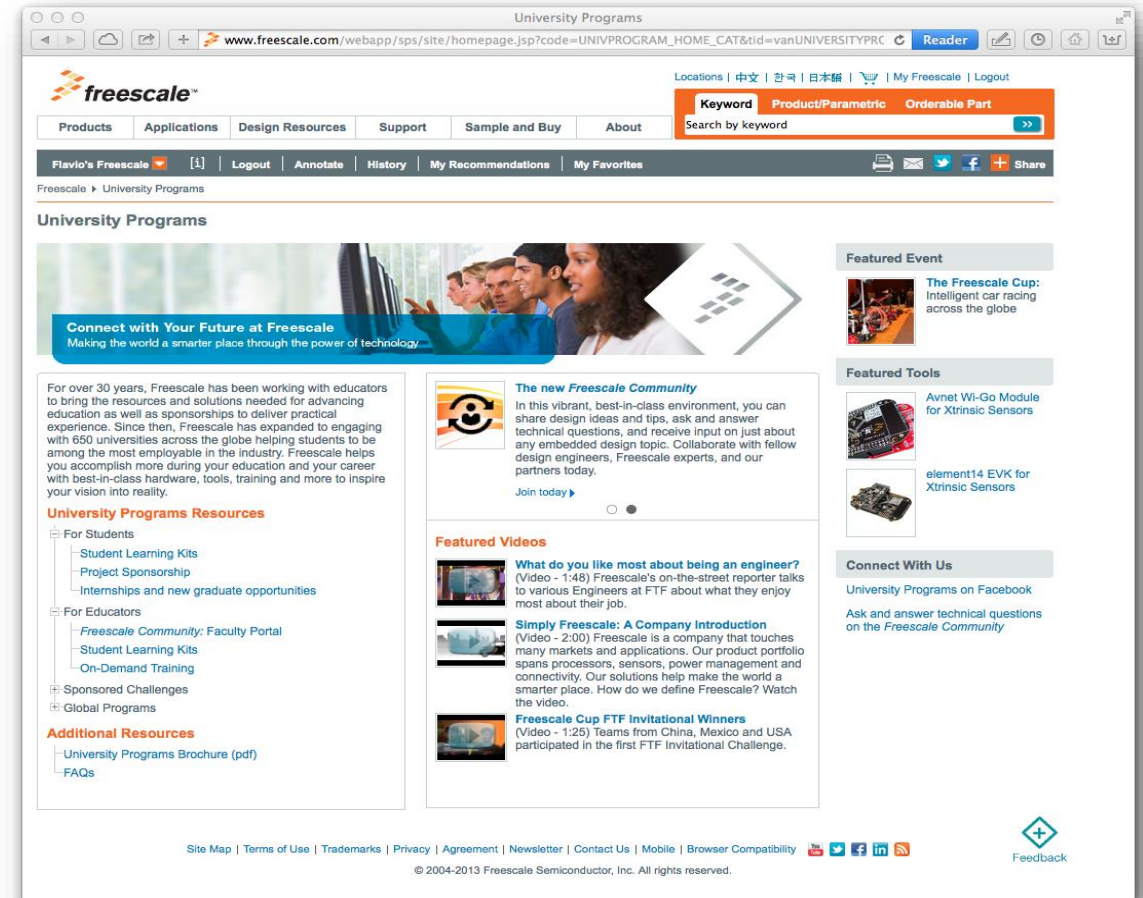


# Where to start??

Freescale University Main Page provides guidance

- Project registration
- The Freescale Cup
- Educators teaching material

<http://www.freescale.com/universityprograms>

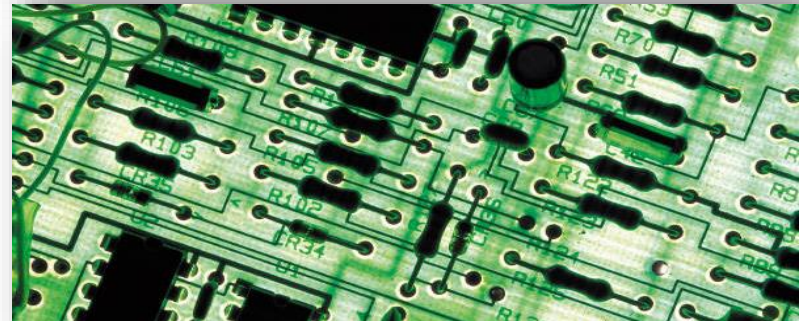


# Student Project Sponsorship

- Standard discount 15% discount on development tools
- Project sharing via YouTube video
- Free Academic CodeWarrior license

Registration page from the Freescale University Page

<http://www.freescale.com/universityprograms>



# The Faculty Portal: Your Source for Courseware

<https://community.freescale.com/groups/faculty-portal>

The screenshot shows the Faculty Portal page on the Freescale Community website. The page is titled "Faculty Portal" and is part of the "Freescale Community" group. The navigation bar includes "Home", "Content", "People", "Places", "Freescale.com", "Apps", and "Create". The main content area features a "YOU CAN CUSTOMIZE THIS PAGE" section with a "Customize" button. Below this is a "Welcome to the Faculty Portal" message from "The University Programs team". The "FEATURED CONTENT" section lists several articles, including "S08, ColdFire V1, V2 and Kinetis KL25Z Courseware Book for Bachelor Studies" and "Kinetic Teaching Lab from MTA Bucharest". The right sidebar contains "POPULAR LINKS" (University Community Home, Premier Partners, Courses Available) and "ACTIONS" (Start a discussion, Write a document, Upload a file, Create a poll, Create by email, Invite people to join this group, Group feeds, Create a video). The "APP ACTIONS" section includes "Connect email distribution".



# The Freescale Cup: Meet the Community

<https://community.freescale.com/docs/DOC-1284>

The screenshot shows a web browser window displaying the 'The Freescale Cup Knowledge Center' page. The page header includes the Freescale Community logo, navigation links (Home, Content, People, Places, Freescale.com), and a search bar. The main content area features a title 'The Freescale Cup Knowledge Center' with a 'Version 55' badge and a creation/modification date. Below the title is a welcome message and a table of links categorized into 'General Information', 'Hardware Components', 'Fundamental Concepts (Theory)', and 'Real world usage (Practical)'. A 'Connect with teams in your region!' section follows, listing regional links for Brazil, Japan, United States, EMEA, Malaysia, TFC - Mexico:Avanzado, India, Mexico, and Taiwan. The page also includes a 'MORE LIKE THIS' section with related document links and an 'INCOMING LINKS' section with recent updates. At the bottom, there is a view count, category tags, and an average user rating of 2 stars based on 2 ratings.

General Information		Hardware Components
<a href="#">History of the Freescale Cup</a>	<a href="#">Assembly Directions</a>	<a href="#">Line Scan Camera</a>
<a href="#">Race Track Information</a>	<a href="#">Rules</a>	<a href="#">Servo Motor</a>
<a href="#">Where to buy?</a>	<a href="#">FAQ's</a>	<a href="#">Drive (DC) Motors</a>
	<a href="#">Community created accessories</a>	<a href="#">Motor Driver (H-Bridge)</a>
		<a href="#">Battery</a>

Fundamental Concepts (Theory)	Real world usage (Practical)
<a href="#">MCU 101 Tutorials</a>	<a href="#">Kinetis FRDM-KL25Z</a>
	<a href="#">Kinetis TWR-K40X256</a>
	<a href="#">Qorivva MPC-5604B</a>
	<a href="#">K40 KwikStik</a>

Connect with teams in your region!		
<a href="#">Brazil</a>	<a href="#">EMEA</a>	<a href="#">India</a>
<a href="#">Japan</a>	<a href="#">Malaysia</a>	<a href="#">Mexico</a>
<a href="#">United States</a>	<a href="#">TFC - Mexico:Avanzado</a>	<a href="#">Taiwan</a>



# Getting Free Samples

<http://www.freescale.com/samples>

Order Samples

www.freescale.com/webapp/sps/site/overview.jsp?code=ORDER\_SAMPLES&tid=vanSAMPLES

Locations | 中文 | 한국 | 日本語 | My Freescale | Logout

Products Applications Design Resources Support Sample and Buy About

Keyword Product/Parametric Orderable Part

Search by keyword

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Freescale > Sample and Buy > Order Samples

### Order Samples

Samples usually arrive within 48 hours. Delivery time varies upon product availability and shipping method. You can verify if we have stock at the time you place the order, and if there isn't stock, you will be notified when stock is available. You may view your order status by clicking on the Order History link on your [registered user home page](#).

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#### Additional Inventory

- [Obsolete Products](#)  
Purchase remaining inventory of End of Life (EOL) products

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Feedback





# Connect via our Social Networks

- University Programs of Facebook  
<https://www.facebook.com/FreescaleUniversityPrograms>
- University Programs on LinkedIn  
[https://www.linkedin.com/groups?home=&gid=3889059&trk=anet\\_ug\\_hm](https://www.linkedin.com/groups?home=&gid=3889059&trk=anet_ug_hm)
- Freescale on Google+  
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- Freescale on Twitter <https://twitter.com/freescale>
- The Freescale Community  
<https://community.freescale.com/community/uvp>





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