

XILINX ADAPTIVE COMPUTING CONTEST OFFICIAL RULES

PURCHASE OF ONE OF THE FOLLOWING FROM XILINX OR A XILINX AUTHORIZED DISTRIBUTOR IS NECESSARY TO ENTER OR WIN THIS CONTEST*:

**Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit
Avnet Ultra96-V2 Development Board
Alveo U50 Accelerator Card (either physically on premises or through Nimbix)**

***Unless Xilinx elects in its sole discretion to provide to you loaner Hardware (as defined in Section 7 below).**

How to enter: The Xilinx Adaptive Computing Contest (the "Contest") is open for project entries from Tuesday, July 7, 2020 from 12:01 am (Pacific Time) to Saturday, November 14, 2020 at 11:59 PM (Pacific Time) ("Entry Period"). If you would like to apply for your chance to receive a free loan of Xilinx Hardware platform (defined in Section 7 below) (subject to availability), you must submit your application along with a detailed proposal of your project before Friday, August 14 at 11:59 PM (Pacific Time) ("Loan Application Period"). Xilinx will evaluate each proposal meeting the minimum proposal requirements described in Section 2 below submitted by an eligible entrant during the Loan Application Period. On or around August 19, 2020 at 11:59 PM (Pacific Time), Xilinx will ship the available Hardware to the individuals or teams whose proposals were determined by Xilinx as demonstrating the most promise of achieving the highest scores based on the judging criteria described in Section 3 below. Xilinx will evaluate all project entries submitted by eligible entrants during the Entry Period based on the judging criteria described in Section 3 below and announce the individuals or teams winning first, second or third place in each of the three Contest categories described below in Section 1. By participating in this Contest, you elect to receive information from Xilinx pertaining to this Contest and Xilinx products and services by email, social media, mail, and by telephone. Proof of sending of entry will not be deemed to be proof of receipt by Xilinx.

1. **Contest Description:**

Xilinx has partnered with Hackster.io to run a design challenge with three distinct platform/application categories. You'll use one of the selected Xilinx Hardware platforms (defined in Section 7 below) to create an exciting new application. With your creativity and expertise combined with the power of Xilinx platforms; the [Vitis development environment](#); and [Vitis AI](#), Xilinx is asking you to solve real world problems in new and innovative ways. If you're up to the challenge, submit a project meeting the minimum requirements described in Section 2 below, showing how you created your project, including a detailed description of the hardware, software, and tools used. Include images, screenshots, and a 3-5 minute video demonstration of your work. The three platform and application categories are as follows:

Intelligent Video Analytics

Use [Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit](#) combined with Xilinx Vitis and Vitis AI to build an intelligent video analytics solution including but not limited to smart city, smart retail, ADAS, robotics vision, medical imaging and many other applications.

Adaptable Compute Acceleration

Use an [Alveo U50 Accelerator Card](#), combined with Xilinx Vitis and Vitis AI to implement hardware acceleration of challenging workloads including but not limited to financial computing, machine learning, computational storage, and data search and analytics.

Adaptive Intelligence of Things

Use an [Avnet Ultra96-V2 Development Board](#), combined with Xilinx Vitis and Vitis AI to build any application that shows the best use of hardware acceleration with programmable logic.

2. **Minimum Submission Requirements:**

General Requirements

- You and every member of your team must be registered as an eligible participant in this Contest. Eligibility rules are described below in Section 4.
- Your entry must be your own original work. See Section 4 below for further information.
- Your entry cannot have been selected as a winner in any other Hackster.io contest.
- Your team may not have more than 5 individual members per entry. By submitting a project to this Contest on behalf of a team, you must acknowledge that you are the designated representative authorized to act on behalf of your team. See Section 4 below for further details.

Hardware Loan Application Requirements

- Note: If you choose to apply for a Hardware loan, you must meet the following requirements. If not, continue to 'Hardware/Software Build Requirements' below.
- Your hardware application must be submitted via the online application form found on the Contest page's "apply for hardware" tab on Hackster.io.
- Your hardware application must be written in English.
- Your hardware application must use, as applicable to the corresponding Contest category, the [Xilinx Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit](#) or [Xilinx Alveo U50 Acceleration Card](#) or [Avnet Ultra96-V2 Development Board](#).
- Your hardware application must solve a problem related to the Adaptive Computing contest. (Intelligent Video Analytics, Adaptable Compute Acceleration, or Adaptive Intelligence of Things)

Hardware/Software Build Requirements

- Your project must be created using, as applicable to the corresponding Contest category, the [Xilinx Zynq UltraScale+ MPSoC ZCU104 Evaluation Kit](#) or the [Xilinx Alveo U50 Accelerator Card](#) or the [Avnet Ultra96-V2 Development Board](#).
- Your project must be created using the Xilinx Vitis or Vitis AI or both.
- Your project must solve a problem related to one of the three categories associated with the contest (Intelligent Video Analytics, Adaptable Compute Acceleration, or Adaptive Intelligence of Things)
- Project Code & Documentation Requirements
 - Your project must include a project name, short project description, cover image, bill of materials (BOM), full instructions, images, and relevant resource files (schematics, code, CAD).
 - Your project must include example software code posted to GitHub.
 - All code must be published to a public code repository on GitHub licensed under the open-source 3-Clause BSD License.
 - You must notify contests@hackster.io of your GitHub account or the repo of your submission.
 - Your project must be written in English.

- Your project must be submitted by Nov 15th, 2020.

3. **Winner Selection and Judging Criteria:**

Each entry will be judged by a committee of 7 distinguished Xilinx employees across the following Xilinx functional organizations: Engineering, Technical Marketing, Worldwide Technical Support, and Product Marketing. Each member of the committee will judge each entry and assign a numerical score based on the criteria below, which may be to the tenth or even hundredth decimal place. The average score will be calculated among all committee members, and all entries will be ranked by average score. In the event of a tie between any eligible entries, an additional judge will break the tie based on the judging criteria described below. The decisions of the judges are final and binding. The criteria is as follows:

Project Documentation (30 points)

Story/Instructions - Show how you created your project, including images, screenshots, and/or a video demonstration of your solution working as intended. Ask yourself: "If I were a beginner reading this project, would I understand how to recreate it?"

Complete BOM (10 points)

Detail the hardware, software and/or tools used.

Code & Contribution (30 points)

Include working code with helpful comments.

Creativity (30 points)

Your idea doesn't have to be original, but it should be creative (a fresh take on an old idea is often worth as much as a brand new idea)

You grant Xilinx an irrevocable, royalty-free, worldwide right and license to use, review, assess, test and otherwise analyze your entry and all its content in connection with this Contest. If Xilinx does not receive a sufficient number of entries meeting the entry requirements, Xilinx may select fewer winners than the number of Contest prizes described in Section 5 below.

4. **Eligibility:** To be eligible to compete in the Contest, you must represent and certify to Xilinx, Inc. ("Xilinx") that you are not a resident of any Xilinx Restricted Country (see below), that you are not on any sanctioned or restricted list published by any governmental agency or the United Nations, that you are 18 years or older as of the date of entry into the Xilinx Adaptive Computing Competition (the "Contest"), that you are not an employee, contractor, vendor, distributor, representative, alliance program member, or family member (defined as an immediate family member and/or persons living in the same household as the winner) of an employee or affiliated party of Xilinx, including but not limited to Xilinx's subsidiaries, distributors, or sales representatives, its advertising or promotion agencies, parent companies, agents, officers, subsidiaries, service providers or affiliates, or any other person or entity directly associated with the Contest) (the "Contest Entities"), that you are the designated representative authorized to act on behalf of your team (if you submitted an entry on behalf of a team), that your entire entry only includes material (including hardware, source code – both open source and third party sourced, user interface, video or images) that you own or that you have permission to use such material from the owner of the intellectual property rights associated with such material, that your entry does not include copyrighted materials (such as source code, user interface, video or images) unless you own or have permission to use the materials, that the work you will and do submit to the Contest does not infringe or misappropriate the intellectual property rights of any other person or entity, that you acknowledge and agree that any work product, invention, software, code, design files, or other intellectual property associated with the work that you will and do submit to the Contest shall be released in source code form (or other human readable format) on a public Github website under the OSI-approved BSD 3-Clause open source license, and that I have returned the Hardware (as defined in the Rules) to Xilinx in its original packaging and in the same condition in which I received such Hardware. Employees of Xilinx, Inc., Xilinx subsidiaries, Xilinx distributors, and Xilinx sales representatives, as well as those involved in the development, production, implementation and distribution of this Contest, and their advertising or promotion agencies, parent companies, agents, officers, subsidiaries, service providers and affiliates, and any other persons or entities directly associated with this Contest ("Contest Entities") and members of the immediate

families and/or persons living in the same household as such persons are ineligible to enter the Contest or win the prize. If you are employed by a company that is not a Contest Entity but that buys from, sells to, competes with, or otherwise, does business with Xilinx or is in similar industry as Xilinx, you have the sole responsibility to review and understand their employer’s policies regarding employee eligibility to participate in this Contest. If you are participating in violation of your employer’s policies, you may be disqualified from this Contest and from receiving the prize. Xilinx disclaims any and all liability or responsibility for disputes arising between an employee and their employer related to this matter.

By submitting your entry to this Contest, you understand and acknowledge (i) that Xilinx may have developed or commissioned materials similar or identical to your submission and you waive any claims you may have resulting from any similarities to your entry, (ii) that after the submission deadline has passed, any project that has been submitted to the Contest cannot be deleted or made private and will remain on the Contest page after the Contest has concluded, (iii) that Xilinx at its sole discretion has the right to remove any information or code submitted in the entry to address compliance with any applicable laws, address any of the restrictions described herein, or for editorial or other purposes deemed necessary, and you agree to sign any documentation necessary for Xilinx or its agents to make use of the foregoing rights.

5. Prizes:

Prizes*: The cash prizes described in the table below will be awarded via VISA or Mastercard gift card(s). Depending upon the number of team members, winners will have the option to divide the cash prize into however many gift cards necessary.

Intelligent Video Analytics	Adaptable Compute Acceleration	Adaptive Intelligence of Things
First Place Team: \$10,000	First Place Team: \$10,000	First Place Team: \$10,000
Second Place Team: \$5,000	Second Place Team: \$5,000	Second Place Team: \$5,000
Third Place Team: \$3,000	Third Place Team: \$3,000	Third Place Team: \$3,000

*The amounts shown in the table are per team, not individual

Whether or not you or your team wins a prize, you understand that you will not receive any compensation or credit for use of your entry, other than what is described in these Contest Rules.

6. Winner Notification: The winners will be notified by phone and email using the phone number and email address submitted with the entry. If the potential winner cannot be contacted after a reasonable effort has been exerted during five (5) business days from the date of the winner selection, if he or she is contacted and refuses the prize, is found to be ineligible, or if he/she cannot or does not comply with these Rules, such potential winner will be disqualified and an alternate winner may be selected. If there is a dispute as to who is the winner, Xilinx will consider the winner to be the authorized account holder of the e-mail address used to enter the contest. If you are a winner, Xilinx will require you to sign an Affidavit of Eligibility and Release of Liability and/or a W-9 tax form or W-8 BEN tax form within 10 days of notification. If you complete a tax form, you will be issued an IRS Form 1099 the following January for the actual value of the prize. You are advised to seek independent counsel regarding the tax implications of accepting a prize. If you are a potential winner and you are 18 or older, but are considered a minor in your place of legal residence, Xilinx may require your parent or legal guardian to sign all required forms on your behalf. If you do not complete the required forms as instructed and/or return the required forms within the time period listed on the winner notification message, Xilinx may disqualify you and select a runner-up.

7. Hardware Loan Terms and Conditions: In the event Xilinx selects your application and proposal for a Hardware loan, Xilinx will loan to you on a temporary basis, subject to availability, a [Xilinx Alveo U50 Acceleration Card](#) (“Hardware”). Xilinx will endeavor to have sixty (20) units of the foregoing Hardware, collectively, available for loan. You may only use the Hardware during the Contest period solely for purposes of developing and testing your entry. In order to maintain your eligibility in the Contest, upon submission of your entry you must return the Hardware to Xilinx in its original packaging and in the same condition in which you received such Hardware. You shall not: (i) decompile, disassemble, reverse engineer or attempt to reconstruct, identify or discover any source code, underlying

ideas, underlying user interface techniques or algorithms of the Hardware by any means whatever, or disclose any of the foregoing; (ii) distribute, lease, lend, use for timesharing, service bureau, and/or application service provider purposes the Hardware; (iii) use the Hardware for the benefit of third parties or allow third parties to use the Hardware; (iv) use the Hardware to develop or enhance any product that competes with the Hardware or any portion thereof; or (vii) employ the Hardware in, or in the development of, life critical applications or in any other application where failure of the Hardware or any results from the use thereof can reasonably be expected to result in personal injury or death. Xilinx assumes the full expense of transportation, insurance, and risk of loss for the Hardware to and from your location. All Hardware remain the property of Xilinx and/or its licensors, and no license or other rights to Hardware are granted or implied hereby beyond the limited right stated in this Section 7 (Hardware Loan Terms and Conditions). All rights not expressly granted to you in these Rules are retained by Xilinx. You acknowledge and agree that any misuse of the Hardware shall be deemed a material breach of these Rules resulting in immediate disqualification from the Contest. You will, at its expense, keep the Hardware free and clear from any liens or encumbrances of any kind (except any caused by Xilinx). You shall give Xilinx immediate written notice of any attachment or judicial process affecting the Hardware or Xilinx's ownership thereof. If requested, you will label the Hardware as the property of Xilinx. (i) Any development board supplied to the you as part of the Hardware ("Development Board") is supplied without an enclosure and you are responsible for determining the emissions from the Development Board when combined with its own hardware design and software and, if required, for providing an appropriate shielded enclosure so that the combination of the Development Board with your hardware and software complies with the EMC Directive (2004/108/EC) and any applicable national implementing legislation; (ii) You will be responsible for the appropriate integration of the Development Board with your hardware and software and any necessary EMC testing that is required prior to the provision of the Development Board to you; (iii) The Development Board is supplied solely for the purposes of assembling the Development Board with hardware and software of the Recipients own design for the purposes of internal evaluation and testing, including testing the electromagnetic compatibility of the combination of the Development Board with your own hardware and software; (iv) The loading of a logic design onto the Xilinx programmable device forming part of the Development Board, which may include, among other things, the configuration of slew rates, phase-lock loops (PLLs) and delayed-locked loops (DLLs) and switching speeds, constitutes a modification to the Development Board that is capable of affecting the EMC characteristics of the Development Board both as regards emissions from the Development Board and as regards its susceptibility to electromagnetic interference (v) The Development Board is not a sub-assembly intended for incorporation into an apparatus by the end-user but rather will undergo an industrial assembly operation/modification in the hands of the Recipient; (vi) You will use the Evaluation Hardware in a manner which does not breach the EMC Directive (2004/108/EC) and any applicable national implementing legislation; (vii) The Development Board will be used only in an industrial facility and will not be used within a residential or mixed area unless contained in a screened room or other appropriate environment. THE MATERIALS ARE PROVIDED "AS IS" AND XILINX MAKES NO WARRANTY, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, REGARDING THE MATERIALS, INCLUDING WITHOUT LIMITATION REGARDING THEIR ACCURACY OR COMPLETENESS, AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, AND THOSE ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE. XILINX' TOTAL LIABILITY FOR DIRECT DAMAGES SHALL NOT EXCEED THE FEES PAID TO XILINX, IF ANY, UNDER THIS AGREEMENT. UNDER NO CIRCUMSTANCES SHALL XILINX BE LIABLE TO RECIPIENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY OUT OF THIS AGREEMENT OR THE USE OF THE MATERIALS, HOWEVER CAUSED, WHETHER ARISING UNDER A THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE OR OTHERWISE), INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF DATA, OR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDIES SET FORTH HEREIN. Recipient shall indemnify, defend and hold Xilinx, its officers, directors, employees and agents (collectively, the "Indemnitees") harmless from and against any and all claims, proceedings, liabilities, damages, costs and expenses (including, but not limited to, attorneys' fees and costs) (collectively, "Damages") arising out of or related to your failure to ensure that the Development Board is operated without causing harmful interference in accordance with the requirements of the EMC Directive (2004/108/EC) or any national legislation implementing such Directive. Recipient shall adhere to all applicable export laws and regulations, and shall not export, reexport, resell, transfer, or disclose, directly or indirectly, the Hardware, including any information derived therefrom, to

any proscribed person, entity, or country, or foreign national thereof, unless properly authorized by the U.S. government and any other applicable government or regulatory body.

8. **Xilinx Software and Other Licensed Items; Copyright:** The development and testing of a competitive Contest submission may require the use of various Xilinx software products including design tools, design files or reference designs that Xilinx makes generally available at www.Xilinx.com or www.github.com/Xilinx ("Licensed Items"). Licensed Items are distributed under separate license agreement(s) which Customer must sign, execute or otherwise accept prior to obtaining and using Licensed Items. You are solely responsible for independently obtaining, at your sole expense, any such Licensed Items that may be required for you to submit a competitive entry. Your entire entry must only include material (including hardware, source code – both open source and third party sourced, user interface, music, video or images) that you own or that you have permission from the copyright/trademark owner to use. Your and/or your team's entry may not include copyrighted materials (such as source code, user interface, background music, images or video) unless you own or have permission to use the materials. Your entry may be disqualified if copyrighted materials, including but not limited to these examples, are a part of your entry without appropriate licensing or permissions. If you do use permissible copyrighted materials, you must include the permissions information by citing the artist/creator and license information. Note that even material released under sites such as Creative Commons, common open source code licenses, and other similar licensing may need permission or acknowledgement as per the specific license.

9. **Applying for the Contest Through Hackster IO:** In addition to applying through www.Xilinx.com to participate in the Contest, you will be required to apply through Hackster IO. In the event that the Hackster IO application process requires you to accept or otherwise agree to any Contest rules, guidelines, policies or other terms and conditions ("Hackster IO Rules"), then you hereby acknowledge and agree that Xilinx shall be deemed a third party beneficiary of your Hackster IO Rules and affirm to Xilinx that you shall strictly comply with all Hackster IO Rules as well as these Contest Rules. As between you and Xilinx, these Contest Rules shall govern and control and prevail over any conflict between and the Hackster IO Rules and these Contest Rules.

10. **General Conditions:** This Contest is subject to all applicable international, federal, state, and local laws and regulations. Return of prize or prize notification as undeliverable will result in disqualification of the winner and an alternate winner may be selected. Unless prohibited by law, acceptance of prize constitutes (i) permission for the Xilinx and its agents to use the winner's name, address (city and state), statements, biographical information, voice, photo and/or likeness for advertising and trade purposes without further compensation, worldwide and in perpetuity, in any and all forms of media, now known and hereafter devised, including without limitation online; (ii) a release by the winner of the Xilinx and Contest Entities of any and all claims arising out of or in connection with the administration of this Contest, the use, misuse, and/or possession of his/her entry, and/or acceptance, possession and/or use or misuse of the prize. General correspondence and inquiries regarding this Contest may not be acknowledged or answered; provided however, that you may submit technical questions and issues to the general comment board available in Hackster IO, although you acknowledge and agree that Xilinx has no obligation to respond to your question. Additionally, some correspondence with those whose proposals are submitted to Xilinx may be required to facilitate the logistical requirements and other issues related to shipping loaned Hardware. Apart from the aforementioned topics requiring or requesting correspondence, Xilinx may not acknowledge entries or correspond with you. Any person attempting to defraud Xilinx or in any way tamper with this Contest will be ineligible for the prize and will be prosecuted to the full extent of the law. Xilinx is not responsible for lost, late, illegible, misdirected, mutilated, incomplete, or defective entries, malfunctions of electronic equipment, computer hardware, or software, including any technology failure, or human error. Xilinx has the right to cancel, terminate, or modify this Contest if it cannot be completed as planned due to computer virus, bugs, tampering, unauthorized intervention, technical failures, or other conditions beyond Xilinx's control, and to select winner from eligible entries received on or before the termination date. Xilinx is not responsible for any failure to contact you, whether due to technical or human error. Xilinx reserves the right to modify, suspend, or terminate the sweepstakes in the event that it becomes infected by a computer virus or otherwise technically impaired. Void where prohibited by law.

This Contest is subject to these Official Rules. By entering the Contest, you agree to waive any right to and release Xilinx and Contest Entities from any claim of ambiguity or error in the Official Rules or the Contest itself, and agree to be bound by these Official Rules and by all decisions of the Xilinx, which are

final and binding in all respects. By entering the Contest, you affirm that they have read, accepted, and agree to these Official Rules.

11. **Disclaimers:** You agree that Xilinx and Contest Entities shall not be liable for losses or injuries of any kind resulting from acceptance, possession, use, or misuse of prize, participation in this Contest, or any technical malfunctions of the telephone network, computer online system, computer dating mechanism, software, or any combination thereof, or any illegible, damaged, lost, late (including delayed transmissions), mutilated, forged, destroyed, tampered with, misdirected, incomplete, mass machine printed, mechanically duplicated entries or entries otherwise not in compliance with these Official Rules, and such entries will be disqualified. The formation, interpretation, and performance of this agreement shall be governed by the laws of the State of California applicable to agreements made and to be performed by California residents entirely within the State of California without regard to its conflicts of law provisions, with venue in Santa Clara, California. In conducting this Contest, Xilinx may collect personal information from entry when entering the Contest. Except as otherwise provided herein, the information collected is subject to the privacy policy located at: <https://www.xilinx.com/about/privacy-policy.html>.

12. **Winner List: Winner List requests will only be accepted after the winners have been announced, and no later than 180 days after the Contest ends. For the winner list, send a written request contest2020@xilinx.com.**

A copy of these Official Rules may be obtained upon request to contest2020@xilinx.com.

Xilinx Restricted Countries:

Afghanistan
Armenia
Azerbaijan
Bahrain
Belarus
Cuba
Egypt
Georgia
Iraq
Iran
Jordan
Kyrgyzstan
Cambodia
North Korea
Kuwait
Kazakhstan
Laos
Lebanon
Libya
Moldova
Myanmar
Mongolia
Macao
Oman
Pakistan
Qatar
Saudi Arabia
Sudan

Syria
Tajikistan
Turkmenistan
Ukraine
United Arab Emirates
Uzbekistan
Yemen