

[Try Prime](#)

Computers ▾

Departments ▾

Your Amazon.com

Today's Deals

Hello. Sign in

Account & Lists ▾

Orders

Try Prime ▾

0

Cart

Computers

Laptops ▾

Tablets ▾

Desktops ▾

Monitors ▾

Computer Accessories ▾

PC Components ▾

PC Gaming ▾

All Electronics

ELECTRONICS
HOLIDAY

Gift Guide

Wrap up the best gadgets, tech & electronics
Shop now ▸

Electronics ▸ Computers & Accessories ▸ Computer Components ▸ Motherboards



Parallella 18-core Motherboard

by [Parallella](#)[24 customer reviews](#)[| 11 answered questions](#)Price: **\$149.00** & **FREE Shipping**. [Details](#)**In Stock.****Arrives before Christmas.** Choose delivery option in checkout.**Want it Tuesday, Dec. 6?** Order within **15 hrs 29 mins** and choose **Two-Day Shipping** at checkout. [Details](#)Sold by [Adapteva](#) and [Fulfilled by Amazon](#). Gift-wrap available.

- 18-core 5W credit card sized computer
- Includes FPGA, 16-core Epiphany RISC CPU, 2-core ARM CPU
- Gigabit Ethernet, 1GB SDRAM, micro-HDMI, micro-USB, micro-SD
- 24 high speed HW/SW programmable GPIO pins
- The ultimate hacker board

[Compare with similar items](#)**New (1)** from **\$149.00** & **FREE shipping**. [Details](#)**Deals in**
Computers & Accessories
[Shop now](#)

Roll over image to zoom in

[Share](#)

Qty: 1 ▾

☐ Yes, I want **FREE Two-Day Shipping** with [Amazon Prime](#)☐ Include **2-Year Protection** for **\$7.87**[Add to Cart](#)[Turn on 1-Click ordering for this browser](#)**Ship to:**

Select a shipping address:

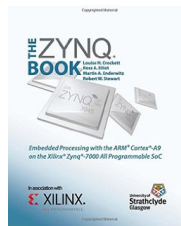
[Add to List](#)

Have one to sell?

[Sell on Amazon](#)**WiFi. Bluetooth. 4GB Storage.**
What will you make?**Intel Edison Kit for Arduino [Dual Core Intel Atom IA-32 500MHz, 4GB eMMC ...]**
13~~\$166.50~~ **\$84.99**[Ad feedback](#)

Customers Who Bought This Item Also Bought

Page 1 of 11

**Parallella Aluminum Case**
\$29.50**Parallella Breakout Board ("Porcupine")**
\$45.00**The Zynq Book: Embedded Processing with the Arm Cortex-A9 on the Xilinx...**
› [Louise H Crockett](#)
13Paperback
\$35.00**SanDisk I/Class 1 Memory - SDC****\$11.96**

Frequently Bought Together



+

Total price: **\$160.96**[Add both to Cart](#)[Add both to List](#)☒ **This item:** Parallella 18-core Motherboard **\$149.00**

☒ [SanDisk Ultra 32GB UHS-I/Class 10 Micro SDHC Memory Card With Adapter - SDSDQUAN-032G-G4A](#) \$11.96

(What's this?)



TRENDnet
100/1000Base-T to SFP
Media Converter (TFC-
1000MGA)

\$42.97



APC Back-UPS 600VA
UPS Battery Backup &
Surge Protector with USB
Charging Port (BE600M1)
4.654

\$55.60



2016 HP Pavilion 15.6
Inch Touchscreen
Premium Flagship Laptop
(Intel Core i5-6200U up...
2

\$499.00






LiCB 18650 Batteries
Rechargeable Lithium ion
Battery 6800mAh 3.7v
2Pack Black(2 PCS)

\$12.90

C
F
K
L

Ad feedback

(What's this?)

1. [Motorola MVME-MVME Repair](#) 
2. [Mātes Plates no M79 - Jaunāko Modeļu Piedāvājums](#) 
3. [Industrial ATX motherboard](#) 

- Sales, Service & Repair of MVME All at your fingertips www.alimartech.com/
- Vēlies salikt jaunu datoru pats vai vecā nodegusi? Izvēlies jaunu pie M79! www.m79.lv/mātes-plates
- ADLINK-Fully configured, tested for industrial control www.adlinktech.com/

Ad feedback

Compare to Similar Items



This item Parallella 18-core Motherboard



ZOTAC Atom Dual-Core
D510/Intel
NM10/WiFi/A&V&GbE/Mini
DTX Motherboard Mini ITX
Motherboard s NM10-B-E
(NM10-DTX WIFI)

ASUS Mini ITX DDR3 1600
Motherboards AM1I-A

ZOTAC Turion II Neo K625
AMD M880G SATA3&USB3.0
WiFi A&V&GbE Mini ITX
Motherboard - M880GITX-A-E

Customer Rating	(24)	(16)	(35)	(7)
Price	\$149.00	\$49.99	\$50.72	\$49.99
Shipping	FREE Shipping	\$9.81	FREE Shipping	\$9.96
Sold By	Adapteva	SabrePC	D-Circle (For Christmas gift, we recommend Expedited shipping. Please check the delivery date before ordering.)	SabrePC
Chipset Type	Information not provided	intel_nm10_express	Information not provided	AMD M880G
Processor Socket	Information not provided	Intel Atom D510	NA	LGA 1156
Device Type	Information not provided	Motherboards	Motherboards	Motherboards
Item Dimensions	2.12 x 3.5 x 0.62 in	8 x 2.8 x 8 in	6.69 x 6.69 x 0.39 in	8.25 x 8.25 x 3 in
Item Weight	1.4 ounces	2 lbs	1.4 lbs	2.2 lbs
Memory Slots Available	Information not provided	2	2	2
RAM Memory Technology	SDRAM DDR3	DDR2 667;DDR2 800	DDR3 1600	DDR3-SDRAM
Supported Motherboard	Information not provided	Information not provided	Mini ITX	Information not provided
Total Pci Slots Free	Information not provided	Information not provided	0	2
Total SATA Ports	Information not provided	6	2	6

Add to Cart

Add to Cart

Add to Cart

Add to Cart

Product Description

The Parallella (P1601) is a great computer for anyone interested in high performance parallel computing and/or advanced hobby projects. The open source, community supported platform is ideal for developers in industry, academia, or for personal use. The P1601 is a fully

12/4/2016 Amazon.com: Parallella 18-core Motherboard: Computers & Accessories

The open source, community supported platform is ideal for developers in industry, academia, or for personal use. The P1601 is a fully enabled programmable computer that includes a 16c-core Epiphany RISC parallel processor, Xilinx Zynq 7Z010 FPGA SOC and has Ethernet, USB, HDMI, Serial peripheral interfaces as well as multiple GPIO ports. The P1601 can be used for programming scalable parallel applications, as part of a cluster of Parallella boards, for embedded applications and much more.

In the Box:

- * P1601 Motherboard
- * Heatsink
- * Heatsink tape
- * 5VDC 2A Wall Adapter

Product Information

Technical Details

Collapse all

Additional Information

Summary

Processor	667 MHz
RAM	1 GB SDRAM DDR3
Number of USB 2.0 Ports	1

Other Technical Details

Brand Name	Parallella
Series	P1601
Item model number	P1601-DK03
Hardware Platform	Linux
Operating System	Linux
Item Weight	1.4 ounces
Product Dimensions	3.5 x 2.1 x 0.6 inches
Item Dimensions L x W x H	3.5 x 2.13 x 0.63 inches
Color	Blue
Processor Brand	Adapteva
Processor Count	18
Computer Memory Type	DDR3 SDRAM
Audio-out Ports (#)	1
Power Source	DC
Voltage	5 volts

ASIN	B0091UD6TM
Customer Reviews	24 customer reviews 3.9 out of 5 stars
Best Sellers Rank	#225 in Computers & Accessories > Computer Components > Motherboards
Shipping Weight	10.4 ounces (View shipping rates and policies)
Date First Available	July 2, 2014

Warranty & Support


Amazon.com Return Policy: You may return any new computer purchased from Amazon.com that is "dead on arrival," arrives in damaged condition, or is still in unopened boxes, for a full refund within 30 days of purchase. Amazon.com reserves the right to test "dead on arrival" returns and impose a customer fee equal to 15 percent of the product sales price if the customer misrepresents the condition of the product. Any returned computer that is damaged through customer misuse, is missing parts, or is in unsellable condition due to customer tampering will result in the customer being charged a higher restocking fee based on the condition of the product. Amazon.com will not accept returns of any desktop or notebook computer more than 30 days after you receive the shipment. New, used, and refurbished products purchased from Marketplace vendors are subject to the returns policy of the individual vendor.

Product Warranty: For warranty information about this product, please [click here](#)


Feedback

Would you like to [update product info](#) or [give feedback on images](#)?
Would you like to [tell us about a lower price](#)?


Related Video Shorts




How to pick a PC motherboard



How to Find a Motherboard's Model &



How to Install a Computer Motherboard




How to Install Case Switches into

Important Information

Seller Warranty Description

A Customer may only return products to ADAPTEVA, and receive a credit or refund on the following conditions: i. Adapteva will only accept returns for faulty products or for products that do not meet the specifications within 30 days from the date of delivery; ii. Damaged or misused products will not be replaced or repaired; iii. The Customer must contact ADAPTEVA prior to the return of any products and obtain the prior consent of ADAPTEVA by submitting the RMA Application Form and obtain a returns number (RMA #) that must be quoted on all returned paperwork; iv. Return must be made within 30 days of the date of delivery (as stated on the delivery documentation). Products must be returned to ADAPTEVA in their original condition and packaging.


Sponsored Products Related To This Item (What's this?)



Belinda Mini Displayport (Mini Dp) to Hdmi Male Cable for Apple Macbook, Macbook Pro,...

61


\$8.98



Mini DisplayPort to HDMI Cable (15FT), Fosmon Mini DP [4K | Thunderbolt Port Compatible] to...


25

\$15.99



Nippon Labs MINIDP-HDMI-10 10-Foot Mini Display Port Male to HDMI Male 32 AWG...


\$14.99



USB 3.0 to HDMI 1080P Adapter Cable Aluminium Alloy Case, Topoint USB to HDMI External Video...

29

\$18.99



Cablelera DisplayPort to HDMI Cable (ZC2520MM-03)

6

\$8.79

Ad feedback

Customer Questions & Answers

See questions and answers

Customer Reviews

24

3.9 out of 5 stars

5 star

71%

4 star

8%

3 star

0%

2 star

0%

1 star

21%

Share your thoughts with other customers

Write a customer review

See all verified purchase reviews

Top Customer Reviews

Great for hard core developers

By [Faramarz Rabii](#) on January 4, 2015

Verified Purchase

This is a device that makes it possible to play with multi-computing on a budget. I used to work on large "Massively Parallel Processing" projects including OSF1/AD. The equipment we used were unique and cost mega-bucks at the time. No normal human could afford them and it was only because of my job that I got access to them. This allows anyone to work on a platform starting with 16 processors. I have not done a whole lot beyond booting and setting it up yet but it looks good so far. Therefore I will give it a high rating even though it could use a few improvements especially improved documentation.

Nevertheless it is a great start and I wish Adapteva the best. My suggestion is that if you are buying one of these then also get:

- 1) Be a developer who is comfortable with hardware and software and have a regular Linux box around. Ubuntu is nice but any Linux would do.
- 2) Have at least one micro-sd card of 16 or better 32 gig size along with reader/writer. It must be *micro* not regular SD!
- 3) Have a powered USB hub
- 4) Have a micro-usb to USB adaptor
- 5) Have a micro-hdmi to regular hdmi adaptor and a monitor able to display it.
- 6) Have a serial RS232 to USB cable for debugging. Hopefully you won't need it but it is cheap and might as well have it.

Customer Images

Most Recent Customer Reviews

I have 3 Parallella's running in 3 different configurations and ...

I have 3 Parallella's running in 3 different configurations and although I'm doing mostly Cortex-A9 and FPGA development, I've used those boards extensively and never had a single... [Read more](#)

Published 3 days ago by patc

Your own personal parallel computing laboratory

An amazing little board based around a 2-cores ARM CPU with 1GB or RAM, running Linux. So far it's similar to a Raspberry Pi. [Read more](#)

Published 4 days ago by Marc Dumais

A super-computer for everyone

Amazing board, easy to use. The fact that you can have 16 + 2 cores for about \$100 is unbelievable. I have experimented with it and it's ideal for those who want to get involved... [Read more](#)

Published 9 days ago by Amazon Customer

This board is amazing! Be for the FPGA on Board (ZYNQ) or ...

This board is amazing! Be for the FPGA on Board (ZYNQ) or for the Epiphany Processor, this board really rocks in performance. [Read more](#)

Published 10 days ago by Lucas Teske

Great machine, great value and

still get the fan to be safe.

If you get in trouble they got a great forum that will help you fix the problems but you have to be willing to work at it. This is not some out of the box product. You need to be willing to roll up your sleeves and dig in there. I spent 3 days before it booted properly for me. The people on their forum are very nice (I am there :-)) and will help you get it working so have no fear.

[Comment abuse](#) 42 people found this helpful. Was this review helpful to you? [Report](#)

This thing Rocks!!!

By [James Scott Jr.](#) on August 6, 2015

Verified Purchase

This thing rocks!!! WooHoo

Very easy to use as a regular linux platform. It really shines when you engage the Epiphany III 16-core chip to do image edge detection, or face recognition, or other advanced computational intense algorithms. SuperComputing for the masses (or just me!).

Note: I own two Parallels and six Raspberry Pi s.



[1 Comment abuse](#) 26 people found this helpful. Was this review helpful to you? [Report](#)

Great device for the dedicated experimenter or computer systems student.

By [Len](#) on June 2, 2015

I got my Parallella-16 on the Kickstarter campaign. It has several interesting features beside the 16 core parallel processor. There is also FPGA built into the Zynq CPU (which is dual ARM core). I believe complete systems can be put together with no additional glue logic. It has built in A/D converters and all sorts of programmable hardware logic that can be set up on initialization then run at hardware speeds. There has been some delay getting the development environment stable, mainly because in parallel with the development, Xilinx was changing the tool set. It is really a nice versatile platform for the experimenter. It is not something for a casual hobbyist, but great for the motivated. You could get lost in this thing for quite some time and not run out of projects. I would give it five stars except for the development environment, which is getting there.

[Comment abuse](#) 18 people found this helpful. Was this review helpful to you? [Report](#)

Adapteva brought their 18xA game to the table with the Parallala.

By [Iaroux](#) on June 25, 2015

Verified Purchase

This is truly a great development system but not for the casual user. I purchased one for science and development and have to say the unit performs as advertised. As others have said you should have Linux experience, good understanding of developing and writing code primarily C and C++. With those under your belt you can learn the parallel aspects and taking advantage of this incredible system. Having 6 core desktop, 4x4 core server running windows, a handful of Raspi's, Arduinos and drawers of Microchip Pic chips around this board just brings it for raw compute power in the tiny size and low power envelop.

[Comment abuse](#) 7 people found this helpful. Was this review helpful to you? [Report](#)

kickstarter user

By [Guillermo](#) on July 23, 2014

I got this board from the kickstarter campaign.

It is certainly a prototype board. A fan is needed to maintain the zynq chip cooled down. Looking forward to use the next adapteva chips with 64 cores and in a few years, 1024 cores :D ... this is ok as a prototype

[4 Comments abuse](#) 17 people found this helpful. Was this review helpful to you? [Report](#)

... kickstarter and I've had trouble coming up with a good project to use it for

By [Amazon Customer](#) on July 23, 2014

I got this board off of kickstarter and I've had trouble coming up with a good project to use it for, but for 150 dollars and 18 cores its pretty impressive.

[1 Comment abuse](#) 16 people found this helpful. Was this review helpful to you? [Report](#)

good for learning about parallelism

I have a Parallella and think its great, getting 18 cores (16 Epiphany and 2 ARM A9) for this price is great value and makes it really accessible to play with parallelism. [Read more](#)

Published 10 days ago by Nick Brown

Dead after 6 months

I used it a couple times last fall to see how it worked. It worked then and unplugged it until i had more time to develop a computing network. [Read more](#)

Published 7 months ago by Ben

Nice board, beware of usb problems

I bought this board to play around with parallel computing, it seemed like an easy way to get started. [Read more](#)

Published 10 months ago by Ray M.

Fun little board to play with.

Easy to get up and running. Worked great for small test projects. Tools are easy to use if your familiar with C, I'm using CMake GCC and works great, some fiddling, but really all... [Read more](#)

Published 10 months ago by Dominic Byrne

Shipped a Broken Product, Refund

Refused...

Horrible customer service and a general non-response to hardware problems mar what should otherwise have been a fun dev experiment board. [Read more](#)

Published 12 months ago by B. Tyler Burton

Doesnt perform very well - limited

support - this was ...

Doesnt perform very well - limited support - this was designed for robotic vision applications as part of their video - however - it just doesn't cut it. [Read more](#)

Published 14 months ago by Daniel Rodriguez

Search Customer Reviews

Much Joy

By [NameGameLoL](#) on March 14, 2015

Verified Purchase

I absolutely Love this device so far. ARMF developer grade fun. Using my Parallella right now. Have Headless ubuntu installed on it. (for the time being.) Have patched it into my network and am Experimenting constantly with it.

[Comment](#) 7 people found this helpful. Was this review helpful to you? [Report abuse](#)

Fantassitic parallel computing research platform!

By [Philip Moyer](#) on March 16, 2016

Verified Purchase

I purchased four of these, along with a cooled enclosure, to act as my new desktop and research machine. It takes a bit of work and some good UNIX skills to get it set up and working correctly, but it is well worth the effort. These devices are excellent distributed/parallel computing research platforms. You can write parallelized algorithms in C or Python (easily). I've no experience with their support for other languages. Note that the forums on parallella dot org are extremely helpful, though quite technical.

One other important thing to note is that even though they say you can run the board with just the heat sink, my monitoring of the chip temperatures showed the board quickly overheats, even when mounted vertically, as recommended. This computer requires, IMO, a case with a fan. Certainly, a fan is required if you want to enclose the boards or run more than one in a cluster.


I am extremely happy with these computers, and I do recommend them. They really aren't for beginners, though. I would suggest you only buy these if you have excellent UNIX and system administration skills.

[Comment](#) 6 people found this helpful. Was this review helpful to you? [Report abuse](#)


[See all verified purchase reviews \(newest first\)](#)

Write a customer review


Customers Who Viewed This Item Also Viewed




[Parallella 18-core Microserver](#)
7
~~\$99.00~~




[Parallella Aluminum Case](#)
~~\$29.50~~




[Parallella Breakout Board \("Porcupine"\)](#)
~~\$45.00~~



[NVIDIA Jetson TK1 Development Kit](#)
22
~~\$192.99~~



[NVIDIA Jetson TX1 Development Kit](#)
9
~~\$579.00~~



[Intel GALILEO Single ATX DDR2 1066 Microcontroller Motherboard GALILEO1.Y](#)
8

[Back to top](#)

Get to Know Us

- Careers
- About Amazon

Make Money with Us

- Sell on Amazon
- Sell Your Services on Amazon

Amazon Payment Products

- Amazon.com Rewards Visa Card
- Amazon.com Store Card

Let Us Help You

- Your Account
- Your Orders

[Australia](#) [Brazil](#) [Canada](#) [China](#) [France](#) [Germany](#) [India](#) [Italy](#) [Japan](#) [Mexico](#) [Netherlands](#) [Spain](#) [United Kingdom](#)

6pm Score deals on fashion brands	AbeBooks Rare Books & Textbooks	ACX Audiobook Publishing Made Easy	Alexa Actionable Analytics for the Web	Amazon Business Everything For Your Business	AmazonFresh Groceries & More Right To Your Door	AmazonGlobal Ship Orders Internationally
Home Services Handpicked Pros Happiness Guarantee	Amazon Inspire Free Digital Educational Resources	Amazon Rapids Fun stories for kids on the go	Amazon Video Direct Video Distribution Made Easy	Amazon Web Services Scalable Cloud Computing Services	Audible Download Audio Books	BeautyBar.com Prestige Beauty Delivered
Book Depository Books With Free Delivery Worldwide	Casa.com Kitchen, Storage & Everything Home	ComiXology Thousands of Digital Comics	CreateSpace Indie Print Publishing Made Easy	Diapers.com Everything But The Baby	DPReview Digital Photography	East Dane Designer Men's Fashion
Fabric Sewing, Quilting & Knitting	Goodreads Book reviews & recommendations	IMDb Movies, TV & Celebrities	Junglee.com Shop Online in India	Kindle Direct Publishing Indie Digital Publishing Made Easy	Prime Now FREE 2-Hour Delivery on Everyday Items	Prime Photos Unlimited Photo Storage Free With Prime
Shopbop Designer Fashion Brands	Soap.com Health, Beauty & Home Essentials	TenMarks.com Math Activities for Kids & Schools	Wag.com Everything For Your Pet	Warehouse Deals Open-Box Discounts	Whispercast Discover & Distribute Digital Content	Woot! Deals and Shenanigans
		Yoyo.com A Happy Place To Shop For Toys	Zappos Shoes & Clothing			