Vantagens do RouterOS para interligar CDNs



#juntossomosmais

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- ✓ Cursando MBA em Gerenciamento de Projetos - FGV;
- ✓ 3 anos e meio de experiência no mercado de Telecomunicações;

O que é CDN?

Content Delivery Network ou Rede de Distribuição de Conteúdo, é um modelo de arquitetura de servidores distribuídos geográficamente e conectados em uma mesma rede, onde ficam armazenadas réplicas do conteúdo de um site.

Basicamente, são servidores que os grandes operadores de conteúdo como a akamai, google, netflix e facebook enviam para seus clientes de maior consumo a fim de melhorar a experiência de uso, encurtando a distancia do conteúdo e o assinante. Com o Mikrotik essa configuração fica muito mais fácil do que com outros fabricantes.



Tipos de CDN

- Bring Home
  - Os caches são instalados em Datacenters ou PTTs.
  - Quem cuida da infraestrutura é a empresa da CDN.

- Enter Deep
  - As CDNs fazer a seção dos caches.
  - Os caches são instalados nos provedores.
  - Quem cuida da infraestrutura é o provedor.



Por que criaram a CDN?

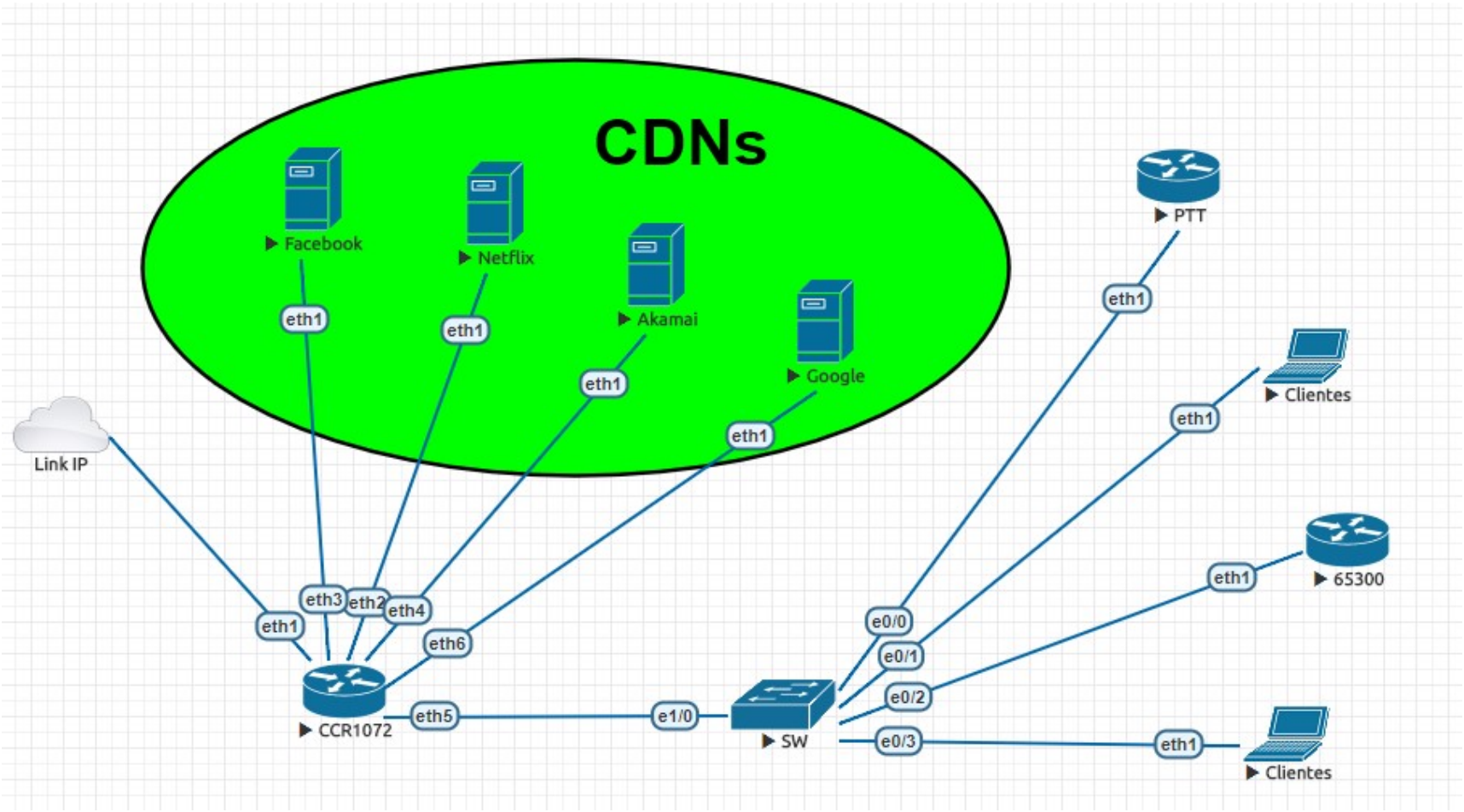
- Desempenho
- Disponibilidade
- Segurança
- Inteligência

Observação importante:

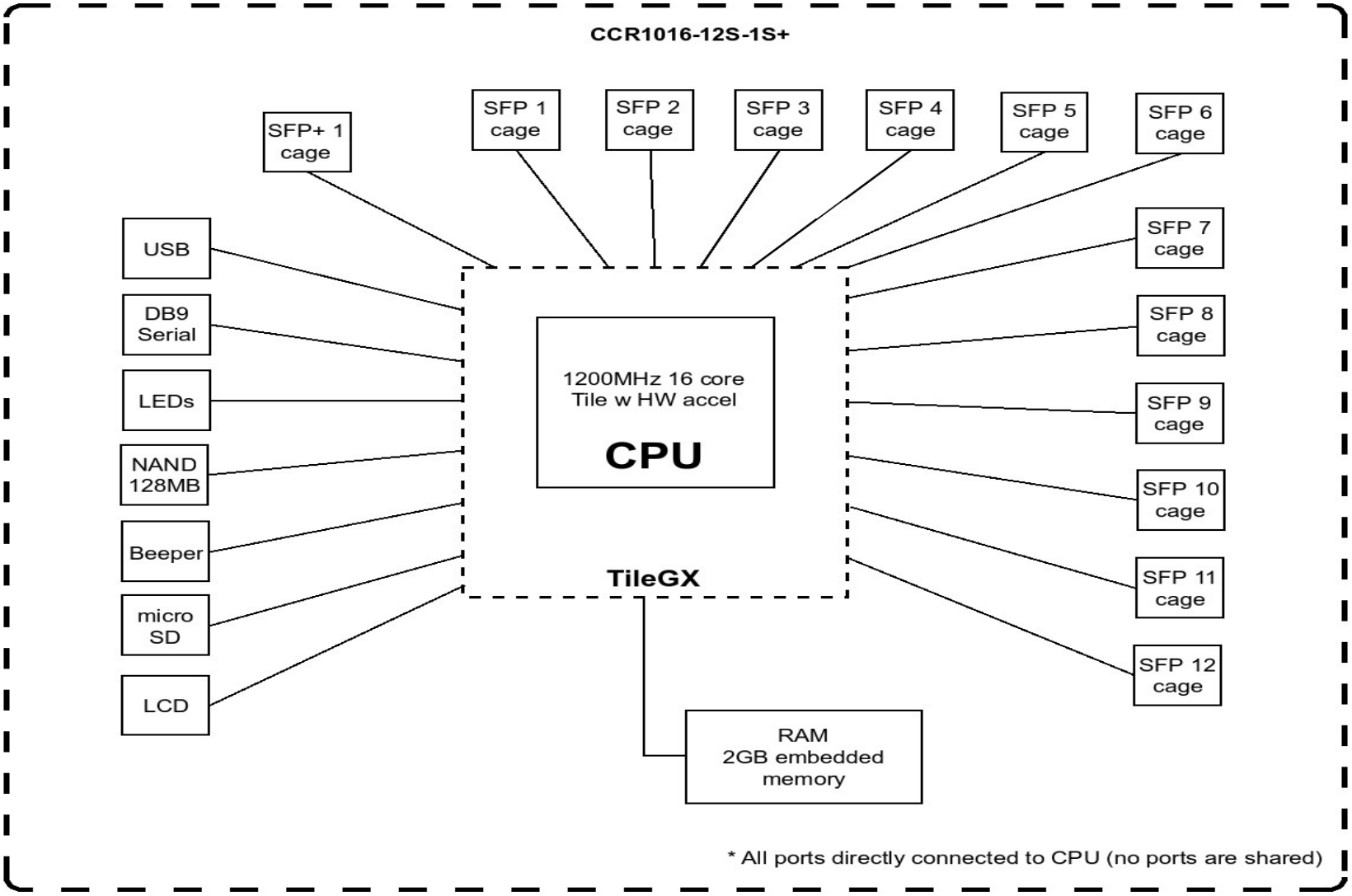
- Economia de banda é um acidente.



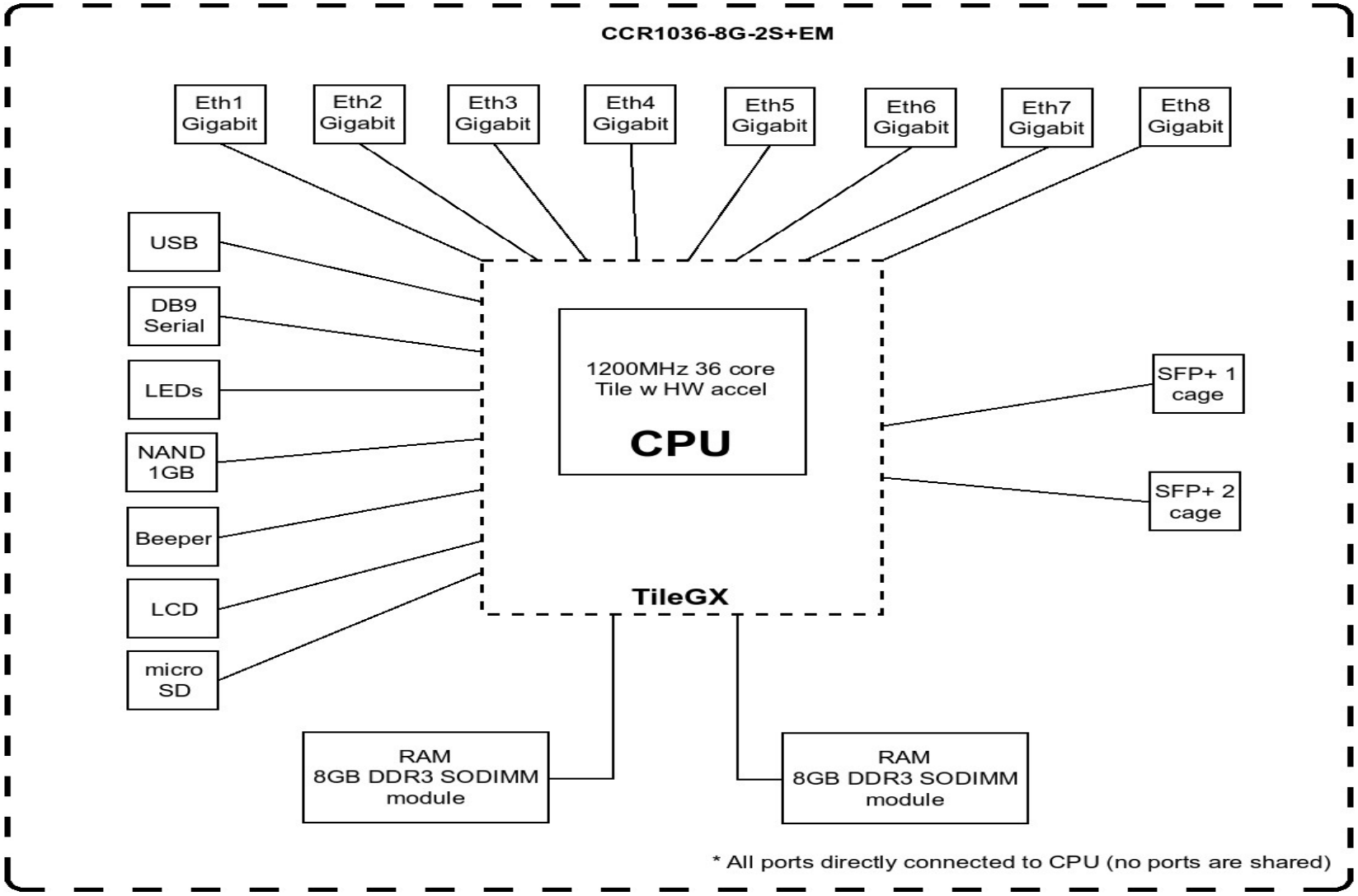
Como o RouterOS pode ajudar?



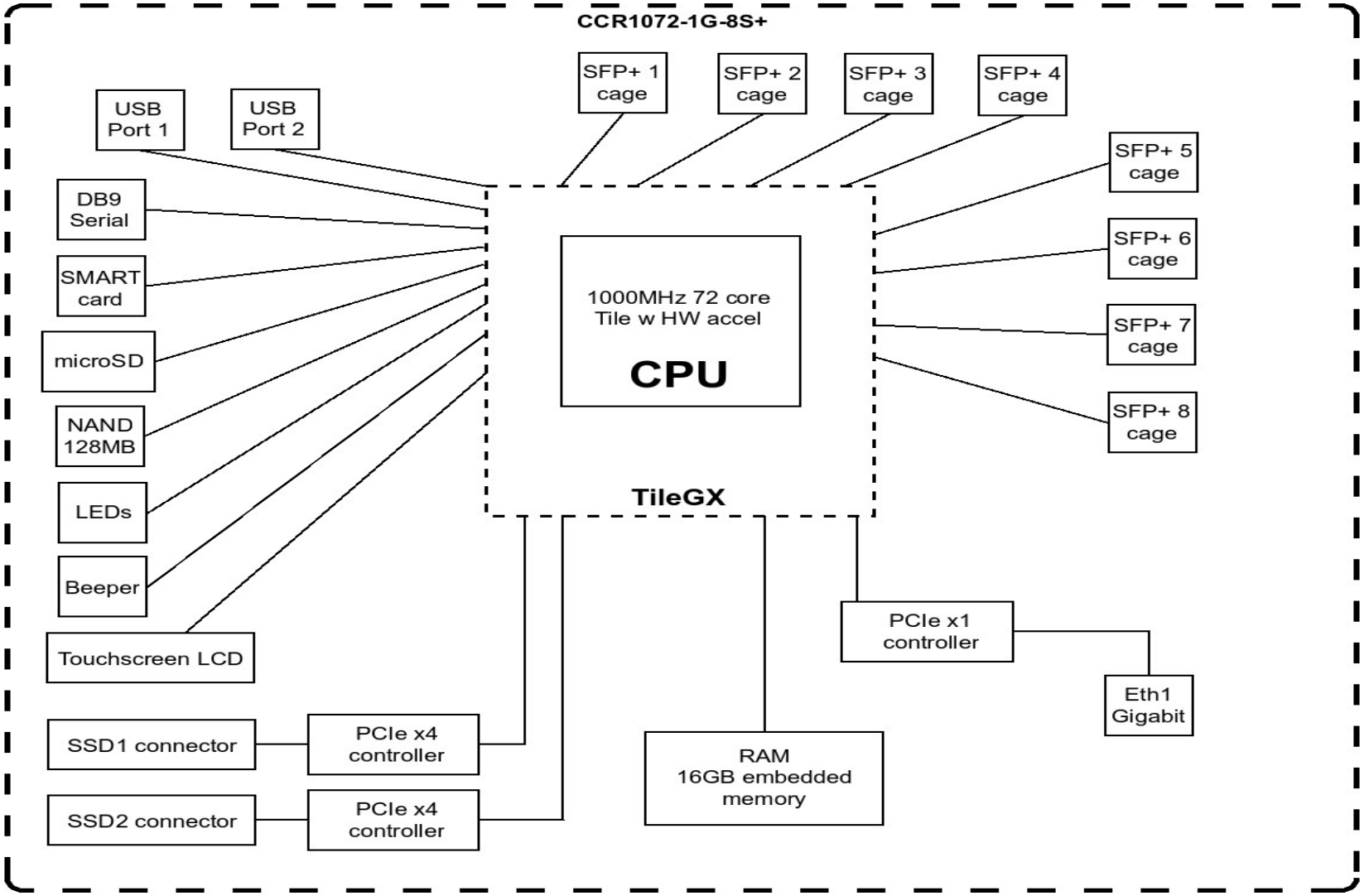
CCR1016


CCR1016-12S-1S+
SFP+ 1 cage
SFP 1 cage
SFP 2 cage
SFP 3 cage
SFP 4 cage
SFP 5 cage
SFP 6 cage
SFP 7 cage
SFP 8 cage
SFP 9 cage
SFP 10 cage
SFP 11 cage
SFP 12 cage
USB
DB9 Serial
LEDs
NAND 128MB
Beeper
micro SD
LCD
1200MHz 16 core Tile w HW accel
CPU
TileGX
RAM 2GB embedded memory
* All ports directly connected to CPU (no ports are shared)

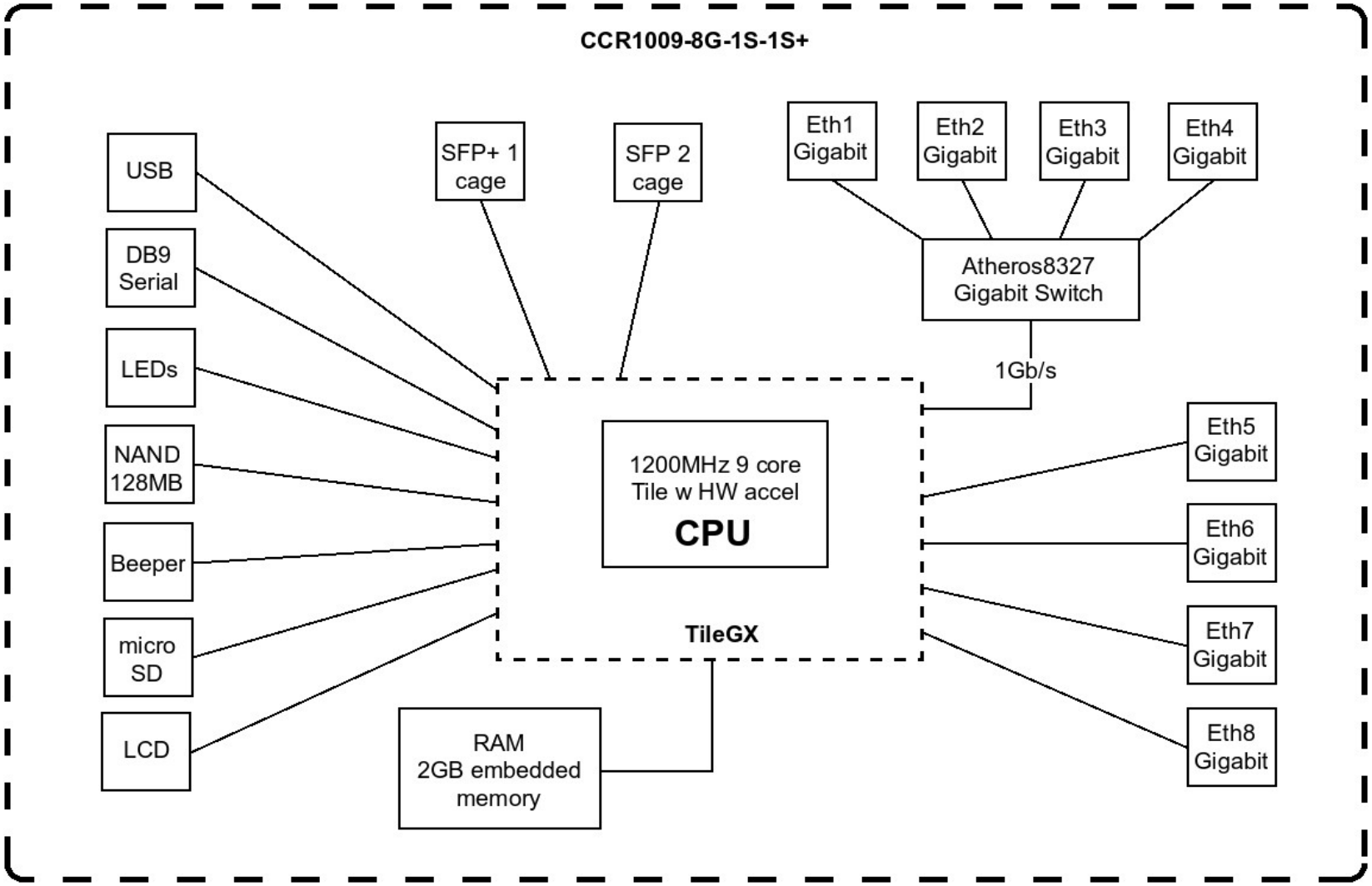
CCR1036


CCR1036-8G-2S+EM
Eth1 Gigabit
Eth2 Gigabit
Eth3 Gigabit
Eth4 Gigabit
Eth5 Gigabit
Eth6 Gigabit
Eth7 Gigabit
Eth8 Gigabit
USB
DB9 Serial
LEDs
NAND 1GB
Beeper
LCD
micro SD
1200MHz 36 core Tile w HW accel
CPU
TileGX
SFP+ 1 cage
SFP+ 2 cage
RAM 8GB DDR3 SODIMM module
RAM 8GB DDR3 SODIMM module
* All ports directly connected to CPU (no ports are shared)

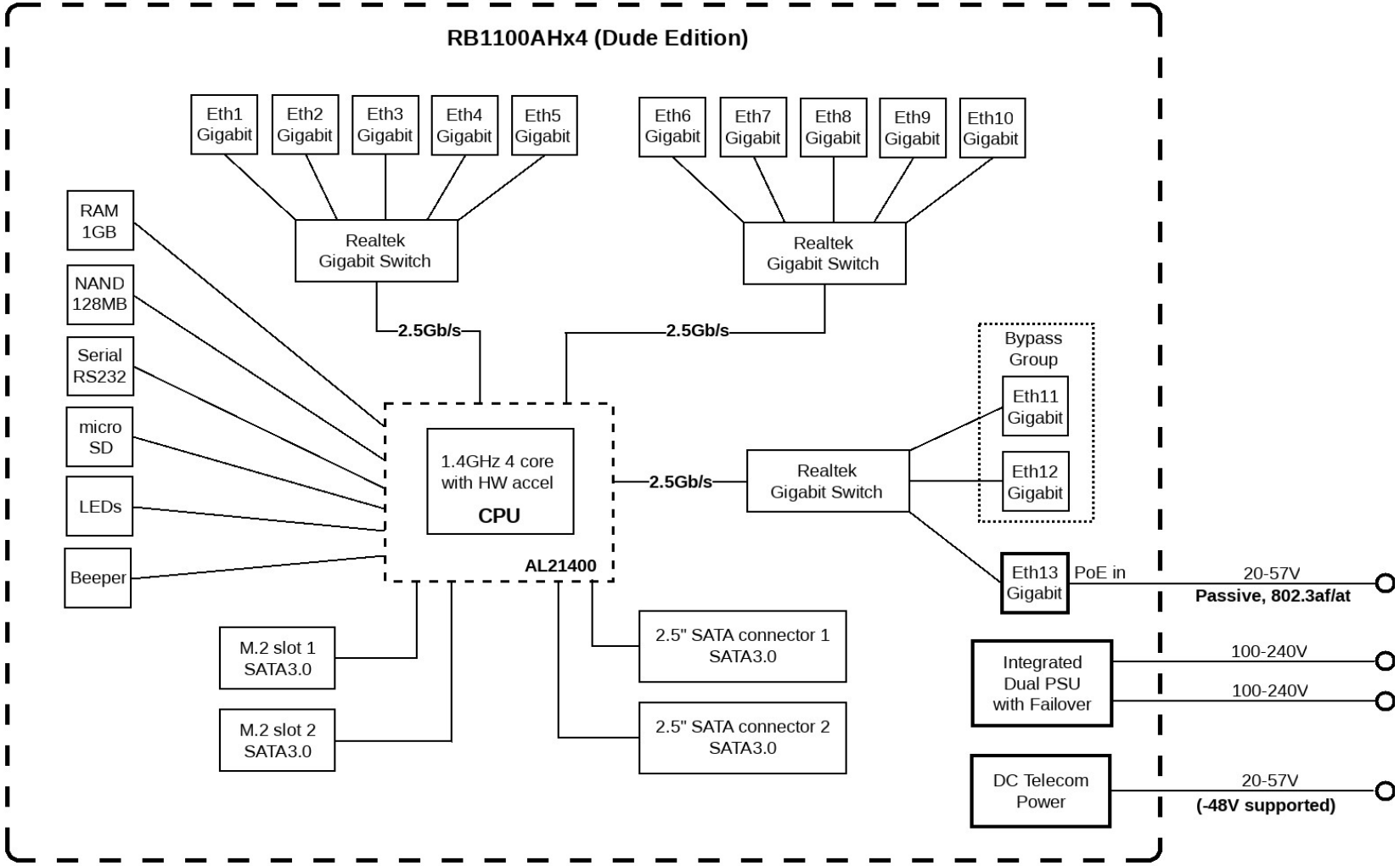
CCR1072


CCR1072-1G-8S+
SFP+ 1 cage
SFP+ 2 cage
SFP+ 3 cage
SFP+ 4 cage
USB Port 1
USB Port 2
DB9 Serial
SMART card
microSD
NAND 128MB
LEDs
Beeper
Touchscreen LCD
1000MHz 72 core Tile w HW accel
CPU
TileGX
SFP+ 5 cage
SFP+ 6 cage
SFP+ 7 cage
SFP+ 8 cage
PCIe x1 controller
Eth1 Gigabit
SSD1 connector
SSD2 connector
PCIe x4 controller
PCIe x4 controller
RAM 16GB embedded memory

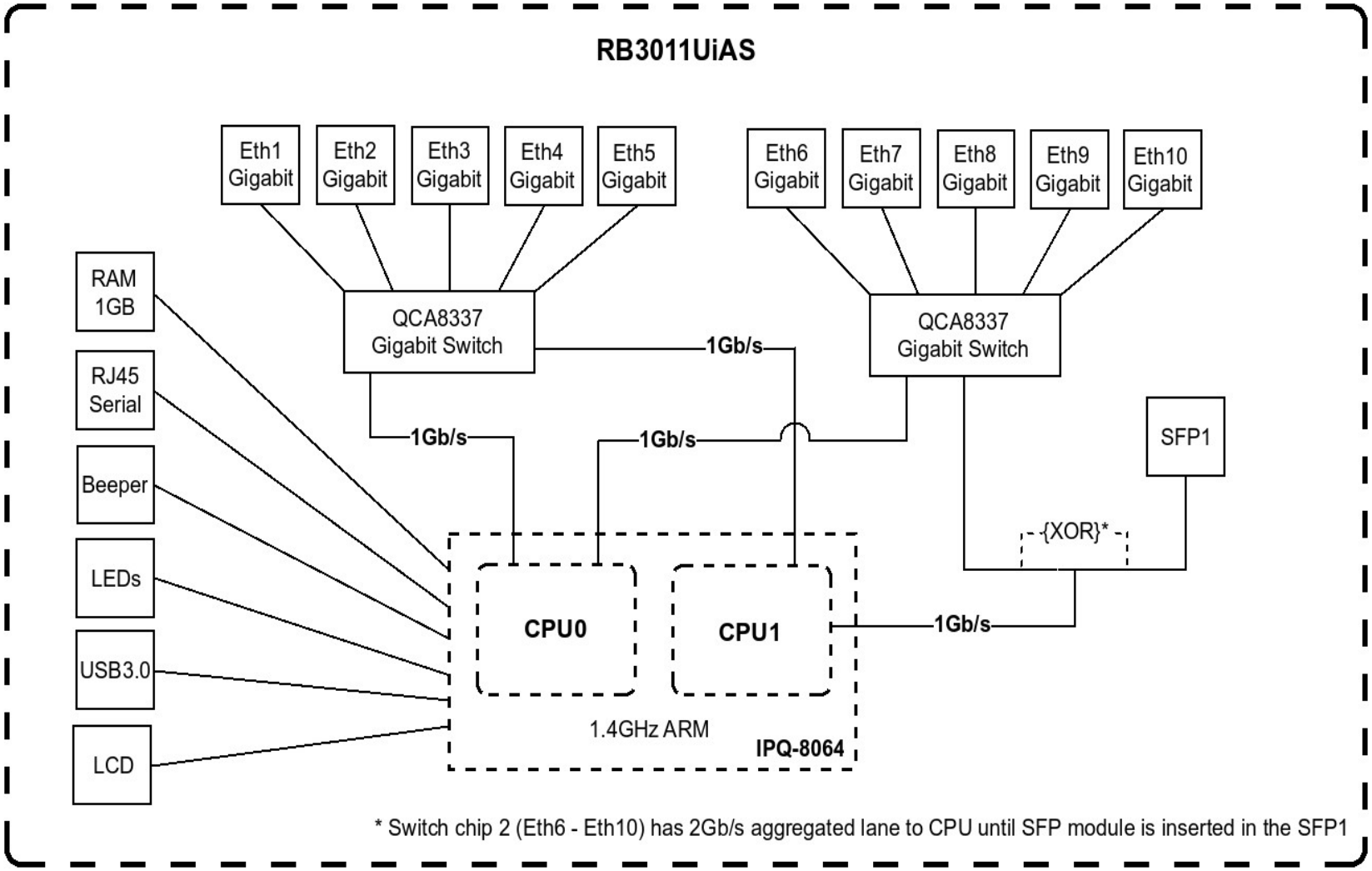
CCR1009 (antiga)



RB1100 AHx4


RB1100AHx4 (Dude Edition)
Eth1 Gigabit
Eth2 Gigabit
Eth3 Gigabit
Eth4 Gigabit
Eth5 Gigabit
Eth6 Gigabit
Eth7 Gigabit
Eth8 Gigabit
Eth9 Gigabit
Eth10 Gigabit
RAM 1GB
NAND 128MB
Serial RS232
micro SD
LEDs
Beeper
Realtek Gigabit Switch
Realtek Gigabit Switch
2.5Gb/s
2.5Gb/s
1.4GHz 4 core with HW accel
CPU
AL21400
2.5Gb/s
Realtek Gigabit Switch
Bypass Group
Eth11 Gigabit
Eth12 Gigabit
Eth13 Gigabit
PoE in
20-57V
Passive, 802.3af/at
M.2 slot 1 SATA3.0
M.2 slot 2 SATA3.0
2.5" SATA connector 1 SATA3.0
2.5" SATA connector 2 SATA3.0
Integrated Dual PSU with Failover
100-240V
100-240V
DC Telecom Power
20-57V
(-48V supported)

RB3011


RB3011UiAS
Eth1 Gigabit
Eth2 Gigabit
Eth3 Gigabit
Eth4 Gigabit
Eth5 Gigabit
Eth6 Gigabit
Eth7 Gigabit
Eth8 Gigabit
Eth9 Gigabit
Eth10 Gigabit
RAM 1GB
RJ45 Serial
Beeper
LEDs
USB3.0
LCD
QCA8337 Gigabit Switch
QCA8337 Gigabit Switch
1Gb/s
1Gb/s
1Gb/s
1Gb/s
SFP1
{XOR}*
CPU0
CPU1
1.4GHz ARM
IPQ-8064
* Switch chip 2 (Eth6 - Eth10) has 2Gb/s aggregated lane to CPU until SFP module is inserted in the SFP1

- **CONHEÇAM O HARDWARE**
- **SEJA ASSERTIVO NA ESCOLHA DO EQUIPAMENTO**

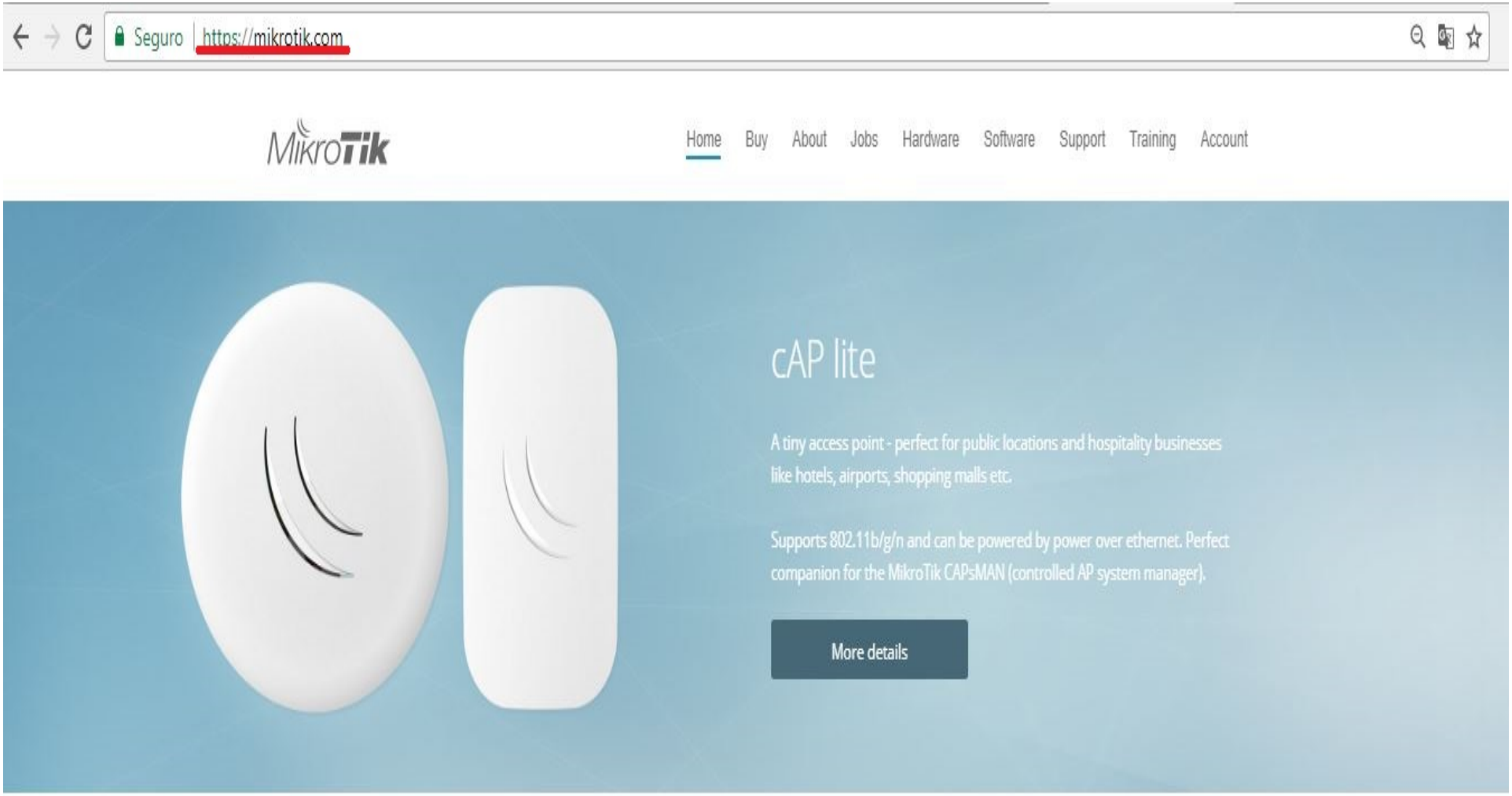
Ethernet test results

CCR1036-8G-2S+		Tile 36 core max possible throughput test					
Mode	Configuration	1518 byte		512 byte		64 byte	
		kpps	Mbps	kpps	Mbps	kpps	Mbps
Bridging	none (fast path)	2275.7	27636.1	6578.9	26947.2	41666.7	21333.4
Bridging	25 bridge filter rules	2275.7	27636.1	5179.7	21216.1	5163.5	2643.7
Routing	none (fast path)	2275.7	27636.1	6578.9	26947.2	41666.7	21333.4
Routing	25 simple queues	2275.7	27636.1	6553.3	26842.3	7643.1	3913.3
Routing	25 ip filter rules	1825.7	22171.3	3033.9	12426.9	3049.7	1561.4

1. All tests are done with Xena Networks specialized test equipment (XenaBay),and done according to RFC2544 (Xena2544)

Onde consigo esses testes e os Diagramas de Blocos dos roteadores??

- www.mikrotik.com/products



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- RouterBOARD
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- Interfaces
- Accessories
- Antennas

Ethernet routers



hEX lite

5x Ethernet, Small plastic case, 850MHz CPU, 64MB RAM, Most affordable MPLS router, RouterOS L4

$39.95



hEX

5x Gigabit Ethernet, Dual Core 880MHz CPU, 256MB RAM, USB, microSD, RouterOS L4

$59.95

RB3011UiAS-RM

The RB3011 is a new multi port device, our first to be running an ARM architecture CPU for higher performance than ever before. The RB3011 has ten Gigabit ports divided in two switch groups, an SFP cage and for the first time a SuperSpeed full size USB 3.0 port, for adding storage or an external 3G/4G modem.

RB3011UiAS-RM Unit comes with 1U rackmount enclosure, a touchscreen LCD panel, a serial console port and PoE output functionality on the last Ethernet port.





Brochure Quick Guide

More info

- RouterBoot firmware
- Block Diagram
- High-res image: [1] [2]
- Send purchase questions
- SFP compatibility list
- RouterOS software manual
- Declaration of conformity (CE)

Related products

Product specifications

Details	
Product code	RB3011UiAS-RM
10/100/1000 Ethernet ports	10
CPU	IPQ-8064-0-519FCBGA-TR-01-0
CPU core count	2
CPU nominal frequency	1.4 GHz
Dimensions	443x92x44mm
License level	5
Max Power consumption	10W

Enfim, como solicitar a CDN?









Akamai

- 500 Mb de consumo
- https://www.akamai.com/us/en/cdn/
- netsupport-tix@akamai.com

Netflix

- 2 Gb de consumo
- https://openconnect.netflix.com/pt_br/

Google

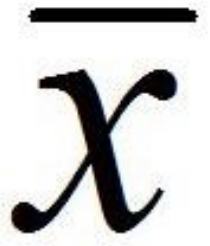
- 2 Gb de consumo
- https://isp.google.com/iwantggc
- ggc@google.com

Facebook

- 3 Gb de consumo
- fna@fb.com

Como é feito o cálculo desse consumo?

- 28 dias corridos durante 08 horas por dia.



Tipos de Equipamentos e capacidade



Considerações finais

- Sejam assertivos na escolha do equipamento
- PeeringDB
- BGP.HE.NET
- Não mintam, sejam honestos
- Não façam pedidos desnecessários
- É ilegal vender conteúdo de CDN

Perguntas



OBRIGADO!

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