

# Содержание

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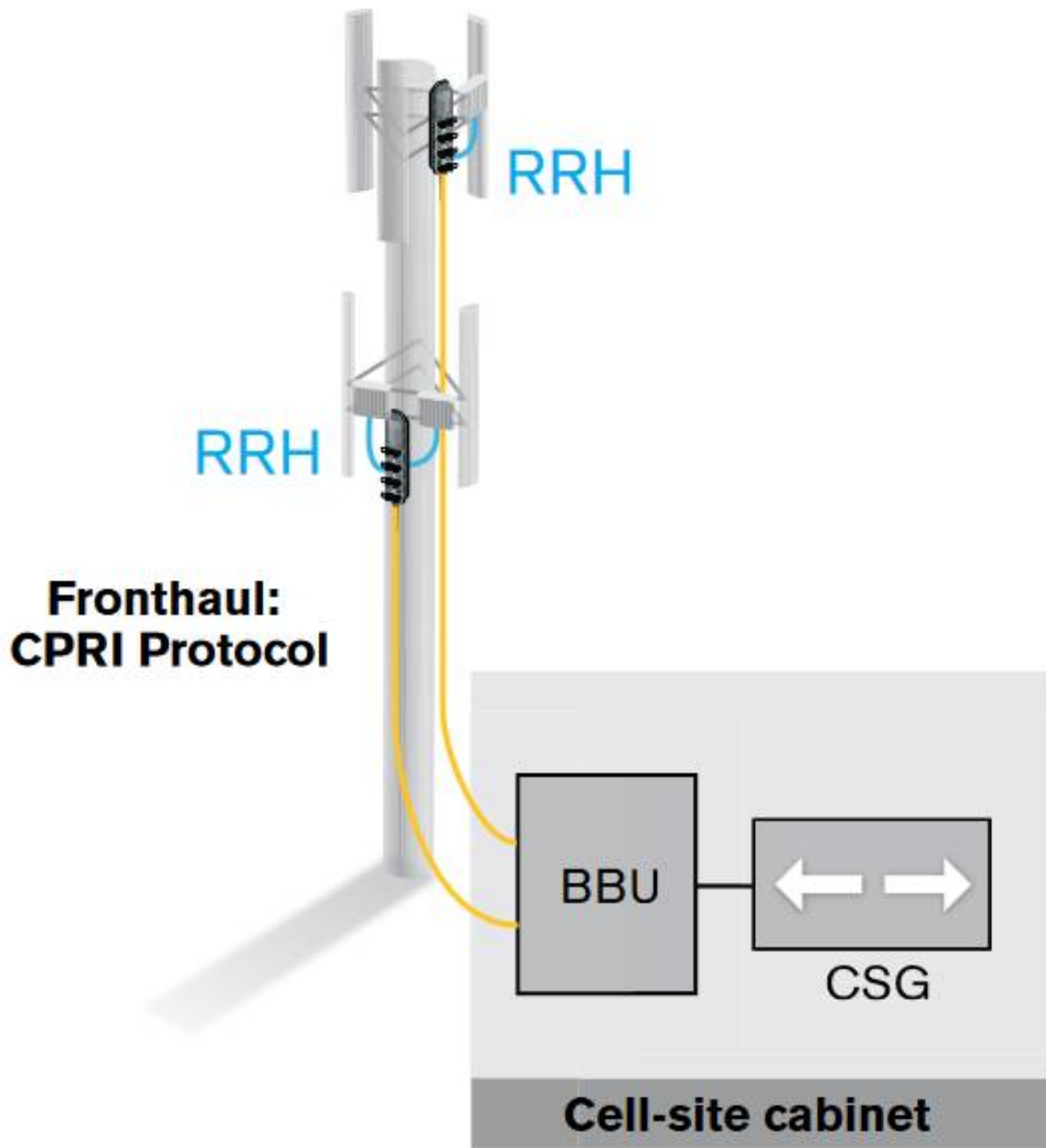


## eCPRI

eCPRI - evolved Common Public Radio Interface - Интерфейс связи между радиопередающим блоком RRU и блоком управления BBU

CPRI\еCPRI SFP	CPRI QSFP	Gowin IP core support	Gowin IP ref	Xilinx IP core support	Xilinx IP refs	
0.6144						8B10B
1.2288		+	61.44			8B10B
2.4576		+	122.88			8B10B
3.072		+	153.6	+	122.88, 153.6	8B10B
4.9152		+	122.88			8B10B
6.144		+	153.6	+	122.88, 153.6, 245.76, 307.2	8B10B
9.8304		+	122.88	+	245.76, 307.2	8B10B
8.11008						64B66B
10.1376	4×10.1376			+	245.76, 307.2	64B66B
12.16512				+	245.76, 307.2, 368.64	64B66B
24.33024	4×24.33024					64B66B
10.3125						
25.78125						

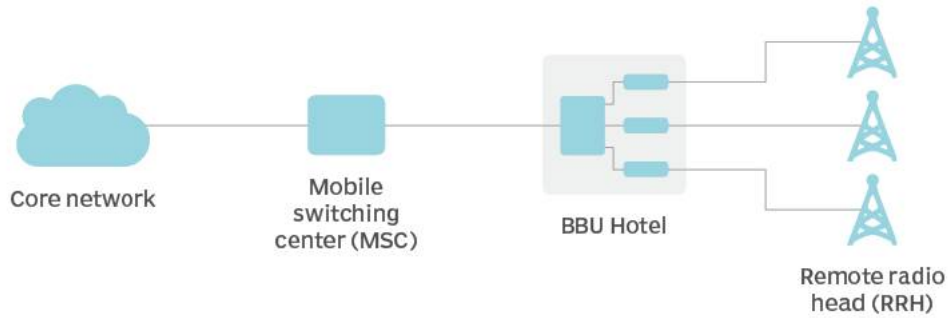
- CPRI Specification V7.0 (gowin, xilinx)
- Layer 1 and Layer 2
- high-speed serial signal transmission between:
  - Radio Equipment Control (REC)
  - Remote Radio Equipment (RE)



[https://itechinfo.ru/content/ecpri\\_interface](https://itechinfo.ru/content/ecpri_interface)

A 2.5 Gbps CPRI link has the capacity to carry the equivalent of 40 MHz air bandwidth LTE IQ data which for instance can be used to carry a 2 time MIMO on a 20 MHz bandwidth.

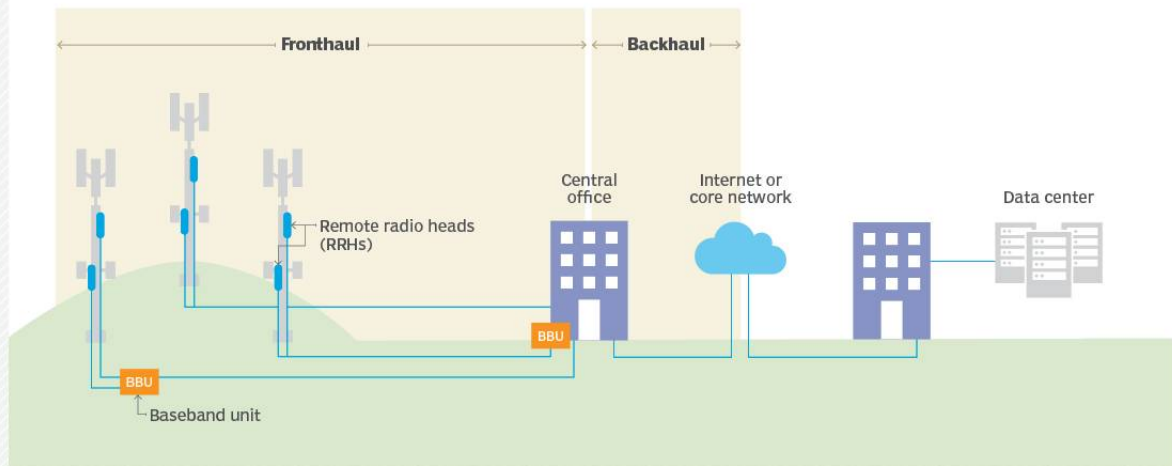
## Cloud RAN (C-RAN)



ICONS: LOVEMASK/DOBESTOCK

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## How fronthaul fits into a C-RAN



DATA CENTER ICON: GRAPNET/STOCK/SHUTTER IMAGES

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eCPRI Specification V1.2 (2018-06-25)) протокола eCPRI (evolved CPRI)

В отличие от CPRI, спецификация eCPRI поддерживает большую гибкость в реализации функционального разделения ресурсов базовой станции на блоки.

Стоит отметить, что спецификации интерфейса eCPRI и CPRI обратно не совместимы.

Page	Abbreviation	Description	Tags
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<a href="#">aisg</a>	AISG	Antenna Interface Standards Group	<a href="#">cellular</a>
<a href="#">du</a>	DU	Digital Units	<a href="#">cellular</a>
<a href="#">ru</a>	RU	Radio Units	<a href="#">cellular</a>
<a href="#">tnl</a>	TNL	Transport Network Layer	<a href="#">cellular, qos</a>
<a href="#">rf</a>	RF	Resource Fair	<a href="#">cellular, qos</a>
<a href="#">rc</a>	RC	Radio and Core	<a href="#">cellular, qos</a>
<a href="#">rbr</a>	RBR	Radio Bearer Realization	<a href="#">cellular, qos</a>
<a href="#">qci</a>	QCI	QoS Class Identifier	<a href="#">cellular, qos</a>
<a href="#">qos</a>	QoS	Quality of Service	<a href="#">cellular, qos</a>
<a href="#">pf</a>	PF	Proportional Fair	<a href="#">cellular, qos</a>
<a href="#">pelr</a>	PELR	Packet Error Loss Rate	<a href="#">cellular, qos</a>
<a href="#">tdd</a>	TDD	Time Division Duplex)	<a href="#">cellular</a>
<a href="#">fdd</a>	FDD	Frequency Division Duplex	<a href="#">cellular</a>
<a href="#">ue</a>	UE	User Equipment	<a href="#">cellular</a>
<a href="#">epc</a>	EPC	Evolved Packet Core	<a href="#">cellular</a>
<a href="#">eps</a>	EPS	Evolved Packet System	<a href="#">cellular</a>
<a href="#">p-gw</a>	P-GW	Packet Data gateway	<a href="#">cellular, lte</a>
<a href="#">s-gw</a>	S-GW	Serving gateway	<a href="#">cellular, lte</a>
<a href="#">sae-gw</a>	SAE-GW	SAE gateway	<a href="#">cellular, lte</a>
<a href="#">sc-fdma</a>	SC-FDMA	Single Carrier Frequency Domain Multiple Acces	<a href="#">cellular, lte</a>
<a href="#">ofdma</a>	OFDMA	orthogonal Frequency Division Multiple Access	<a href="#">cellular, lte</a>
<a href="#">ofdm</a>	OFDM	Orthogonal Frequency-division Multiplexing	<a href="#">cellular, lte</a>
<a href="#">ps</a>	PS	Packet Switched	<a href="#">cellular, lte</a>
<a href="#">sae</a>	SAE	System Architecture Evolution	<a href="#">cellular</a>
<a href="#">hom</a>	HOM	Higher Order Modulation	<a href="#">cellular</a>
<a href="#">eul</a>	EUL	Enhanced Uplink (HSUPA)	<a href="#">cellular</a>
<a href="#">hspa</a>	HSPA	High Speed Packet Access	<a href="#">cellular</a>
<a href="#">dl</a>	DL	downlink	<a href="#">cellular</a>
<a href="#">ul</a>	UL	uplink	<a href="#">cellular</a>
<a href="#">hsupa</a>	HSUPA	High Speed Uplink Packet Access	<a href="#">cellular</a>
<a href="#">hsdpa</a>	HSDPA	High Speed Downlink Packet Access	<a href="#">cellular</a>
<a href="#">x2</a>	X2	interface between the <a href="#">eNodeBs</a>	<a href="#">cellular</a>
<a href="#">s1</a>	S1	interface Between the <a href="#">EPC</a> and <a href="#">E-UTRAN</a>	<a href="#">cellular</a>
<a href="#">cqi</a>	CQI	Channel Quality Indicator - индикатор качества канала	<a href="#">cellular</a>
<a href="#">mme</a>	MME	Mobility Management Entity - система управления мобильными устройствами	<a href="#">cellular</a>
<a href="#">rnc</a>	RNC	Radio Network Controller	<a href="#">cellular</a>
<a href="#">ran</a>	RAN	Radio Access Network	<a href="#">cellular</a>
<a href="#">lte</a>	LTE	Long Term Evolution	<a href="#">cellular, lte</a>
<a href="#">eac</a>	EAC	External Alarm Control	<a href="#">cellular</a>
<a href="#">dscp</a>	DSCP	Differentiated Services Code Point	<a href="#">cellular, qos</a>
<a href="#">oss</a>	OSS	Operation Support System <a href="#">wiki</a>	<a href="#">cellular</a>
<a href="#">plte</a>	pLTE	выделенная беспроводная LTE-сеть предприятия	<a href="#">cellular, lte</a>

<a href="#">private_lte</a>	Private LTE	выделенная беспроводная LTE-сеть предприятия	<a href="#">cellular</a> , <a href="#">lte</a>
<a href="#">gnodeb</a>	gNodeB	gNodeB is a 3GPP-compliant implementation of the 5G-NR base station <a href="#">link</a>	<a href="#">cellular</a> , <a href="#">5g-nr</a>
<a href="#">enodeb</a>	eNodeB	evolved NodeB - базовая станция сети стандарта LTE <a href="#">link</a> <a href="#">wiki</a>	<a href="#">cellular</a> , <a href="#">lte</a>
<a href="#">ca</a>	CA	carrier aggregation <a href="#">link</a>	<a href="#">cellular</a> , <a href="#">lte-advanced</a>
<a href="#">4t4r</a>	MIMO	multiple input multiple output	<a href="#">cellular</a>
<a href="#">nms</a>	NMS	network management system	<a href="#">cellular</a>
<a href="#">cloud-ran</a>	cloud-RAN	cloud radio access network - облачная радиосистема	<a href="#">cellular</a>
<a href="#">c-ran</a>	C-RAN	cloud radio access network - облачная радиосистема	<a href="#">cellular</a>
<a href="#">rrh</a>	RRH	remote radio heads - радиопередающие блоки	<a href="#">cellular</a>
<a href="#">rru</a>	RRU	радиопередающий блок	<a href="#">cellular</a>
<a href="#">ecpri</a>	eCPRI	evolved Common Public Radio Interface - Интерфейс связи между радиопередающим блоком RRU и блоком управления BBU	<a href="#">cellular</a>
<a href="#">cpri</a>	CPRI	Common Public Radio Interface - Интерфейс связи между радиопередающим блоком RRU и блоком управления BBU	<a href="#">cellular</a>
<a href="#">bbu</a>	BBU	centralized baseband units - блоки управления	<a href="#">cellular</a>