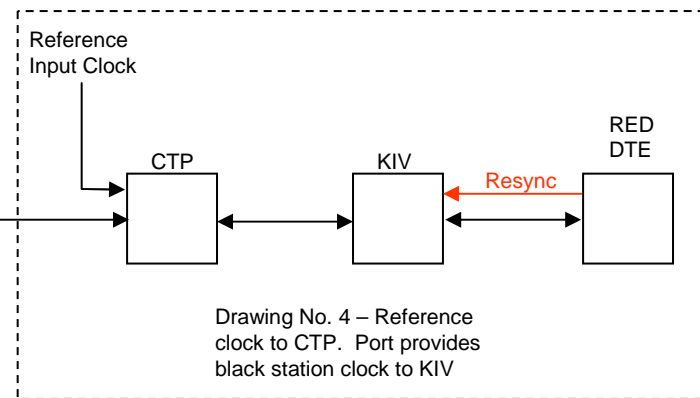
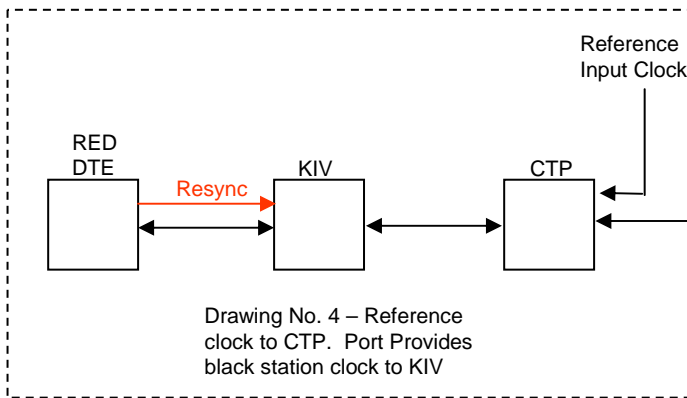
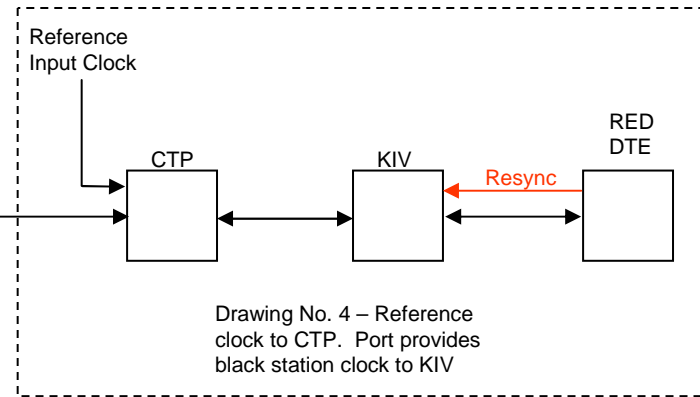
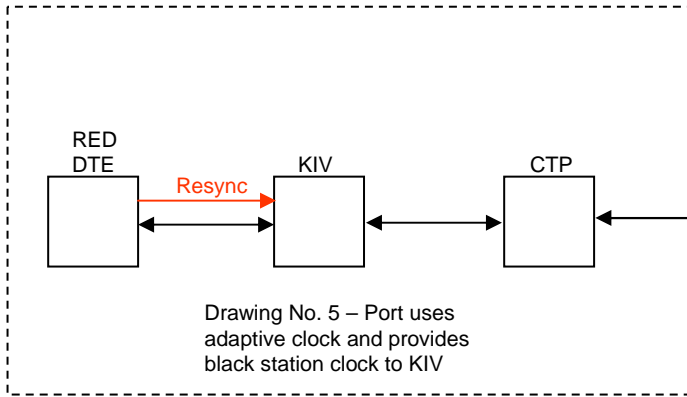
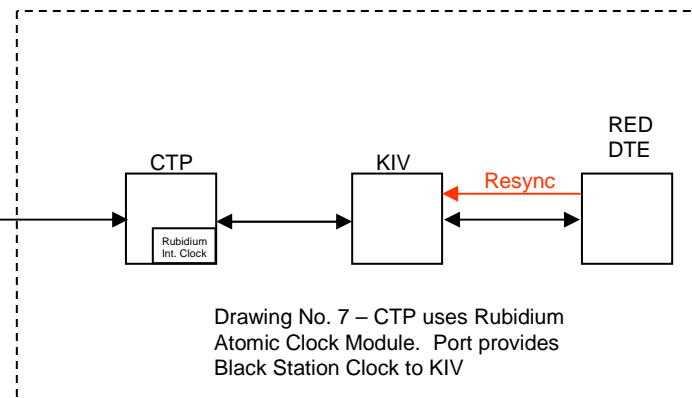
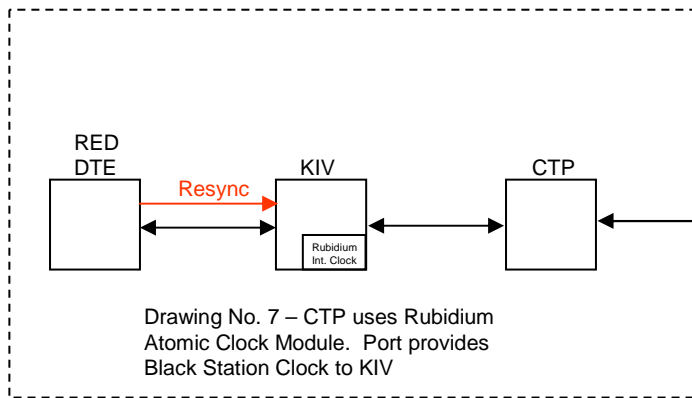
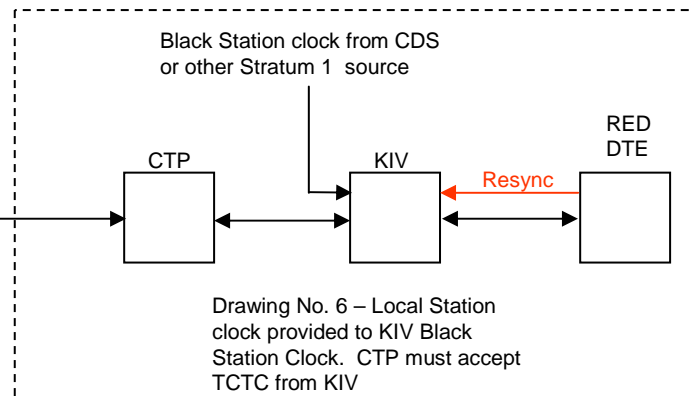
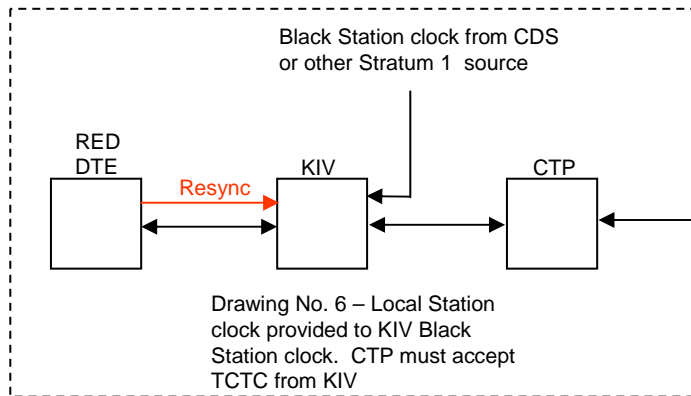


Government Encryptor and Acorn CTP Configuration Summary Document

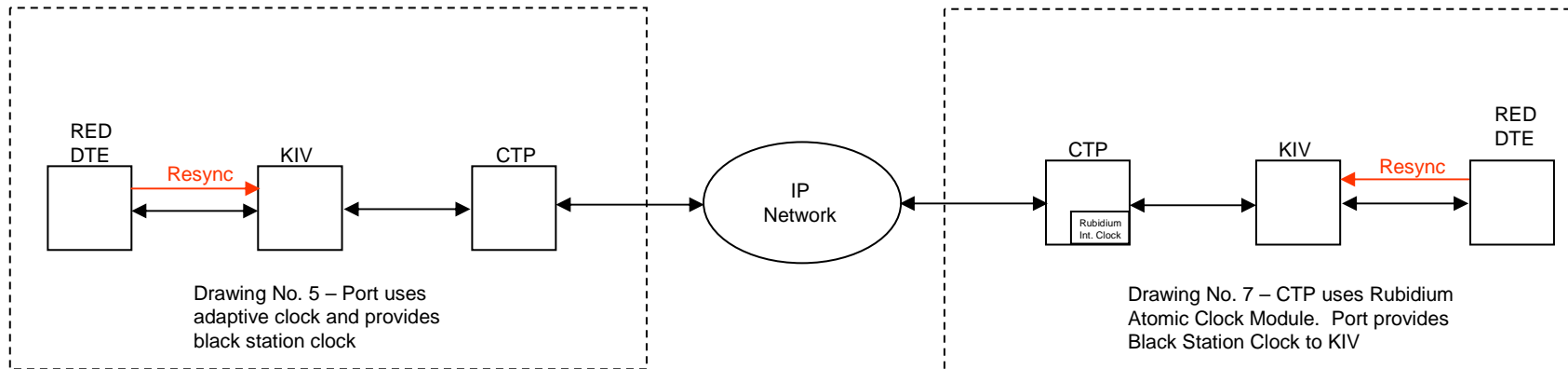
***Acorn Packet Solutions, Inc.
Application Note - Revision 2
October 2004***



Acorn Packet solutions, Inc.	
Date: October 2004	Description High Level KIV and Acorn CTP clock architecture
Project Crypto Docs	
Drawing No. 1	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	

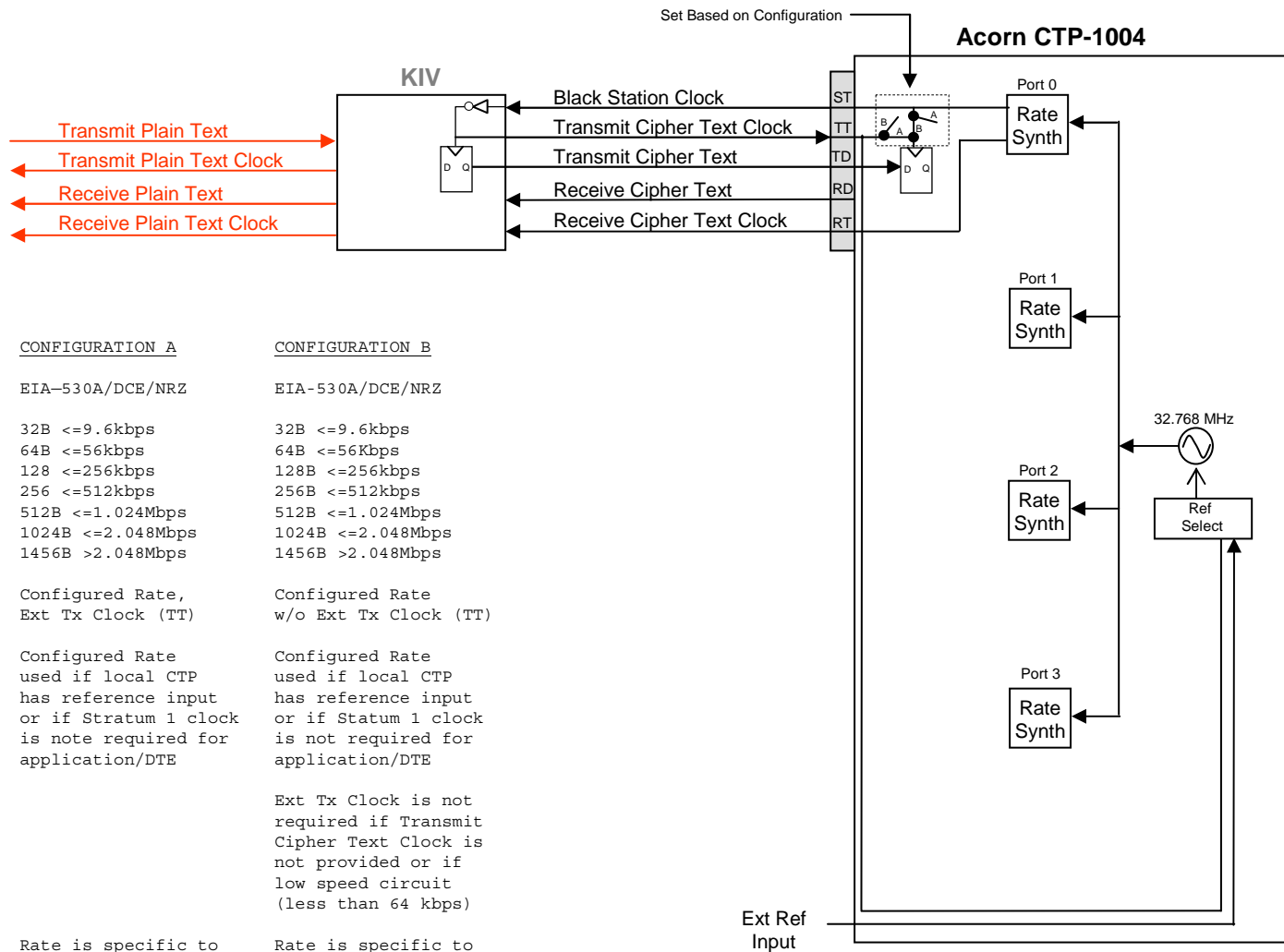


Acorn Packet solutions, Inc.	
Date: October 2004	Description High Level KIV and Acorn CTP clock architecture
Project Crypto Docs	
Drawing No. 2	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	



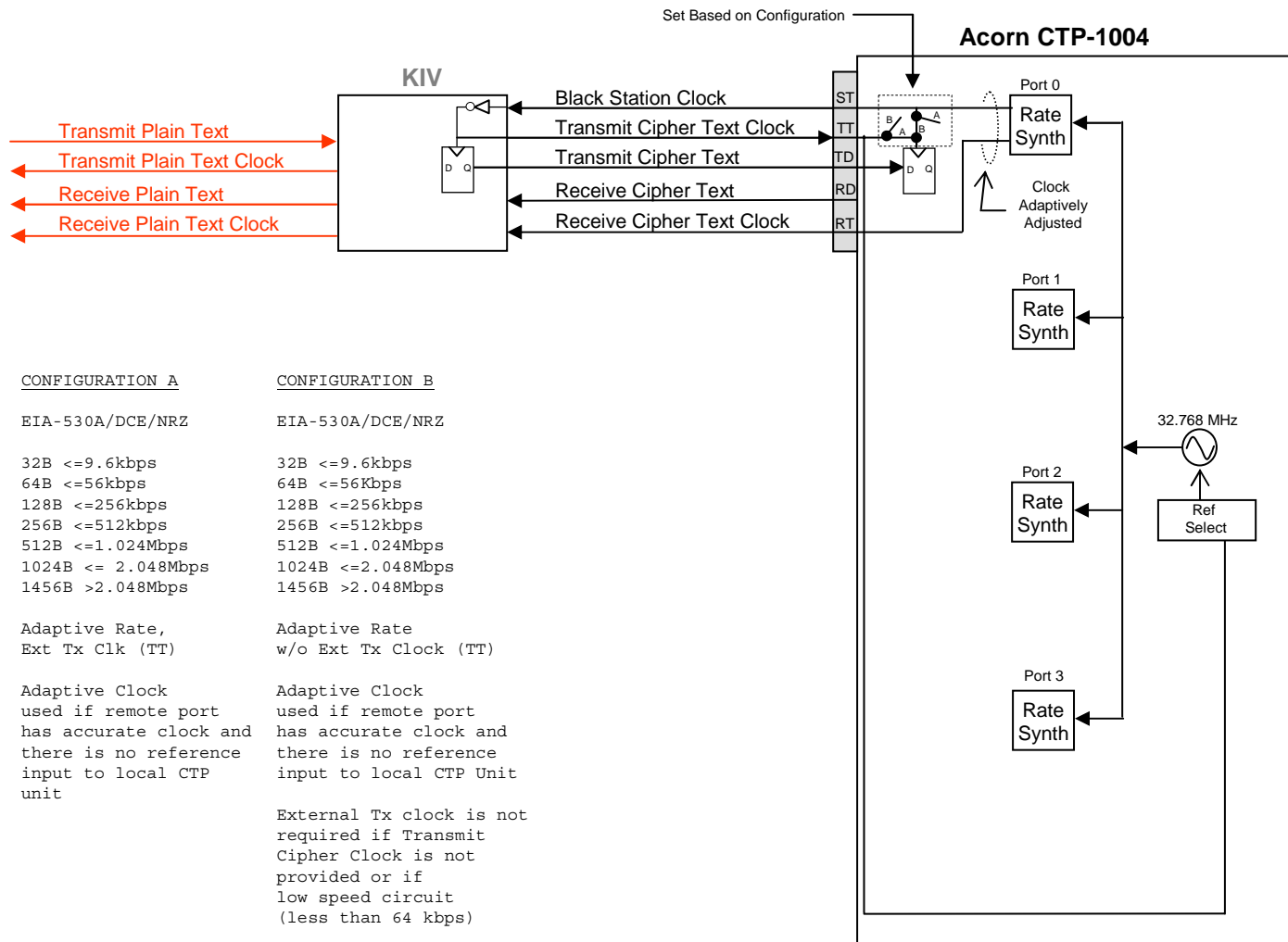
<u>KIV BSC Source</u>	<u>Acorn Reference Source</u>	<u>Port Adaptive Clocking</u>	<u>Drawing Number</u>
Acorn CTP Port	External/Port Input	No	Drawing No. 4
Acorn CTP Port	Internal Rubidium	No	Drawing No. 7
Acorn CTP Port	None	Yes	Drawing No. 5
Local Station Clock	N/A	No	Drawing No. 6

Acorn Packet solutions, Inc.	
Date: October 2004	Description High Level KIV and Acorn CTP clock architecture
Project Crypto Docs	
Drawing No. 3	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	



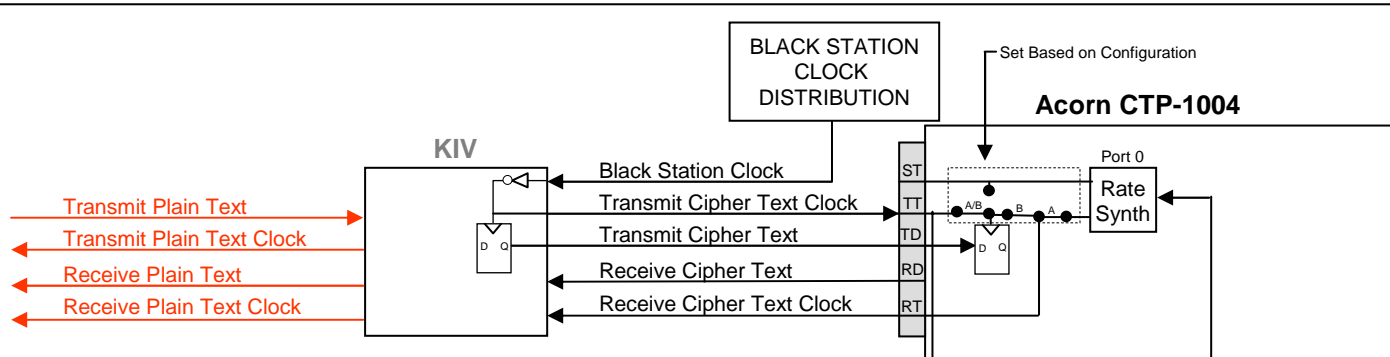
CTP Parameter	CONFIGURATION A	CONFIGURATION B
Interface:	EIA-530A/DCE/NRZ	EIA-530A/DCE/NRZ
Packet Size: (Recommended settings based on circuit Speed)	32B <=9.6kbps 64B <=56kbps 128 <=256kbps 256 <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps	32B <=9.6kbps 64B <=56Kbps 128B <=256kbps 256B <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps
Clock Config:	Configured Rate, Ext Tx Clock (TT)	Configured Rate w/o Ext Tx Clock (TT)
Configuration Notes:	Configured Rate used if local CTP has reference input or if Stratum 1 clock is note required for application/DTE	Configured Rate used if local CTP has reference input or if Statum 1 clock is not required for application/DTE Ext Tx Clock is not required if Transmit Cipher Text Clock is not provided or if low speed circuit (less than 64 kbps)
	Rate is specific to Circuit	Rate is specific to Circuit
	Buffer (Min, Set, Max) is specific to IP network performance	Buffer (Min,Set,Max) is specific to IP network performance

Acorn Packet solutions, Inc.	
Date: October 2004	Description KIV Connectivity: Acorn CTP-1004 used to provided Black Station Clock
Project Crypto Docs	
Drawing No. 4	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	



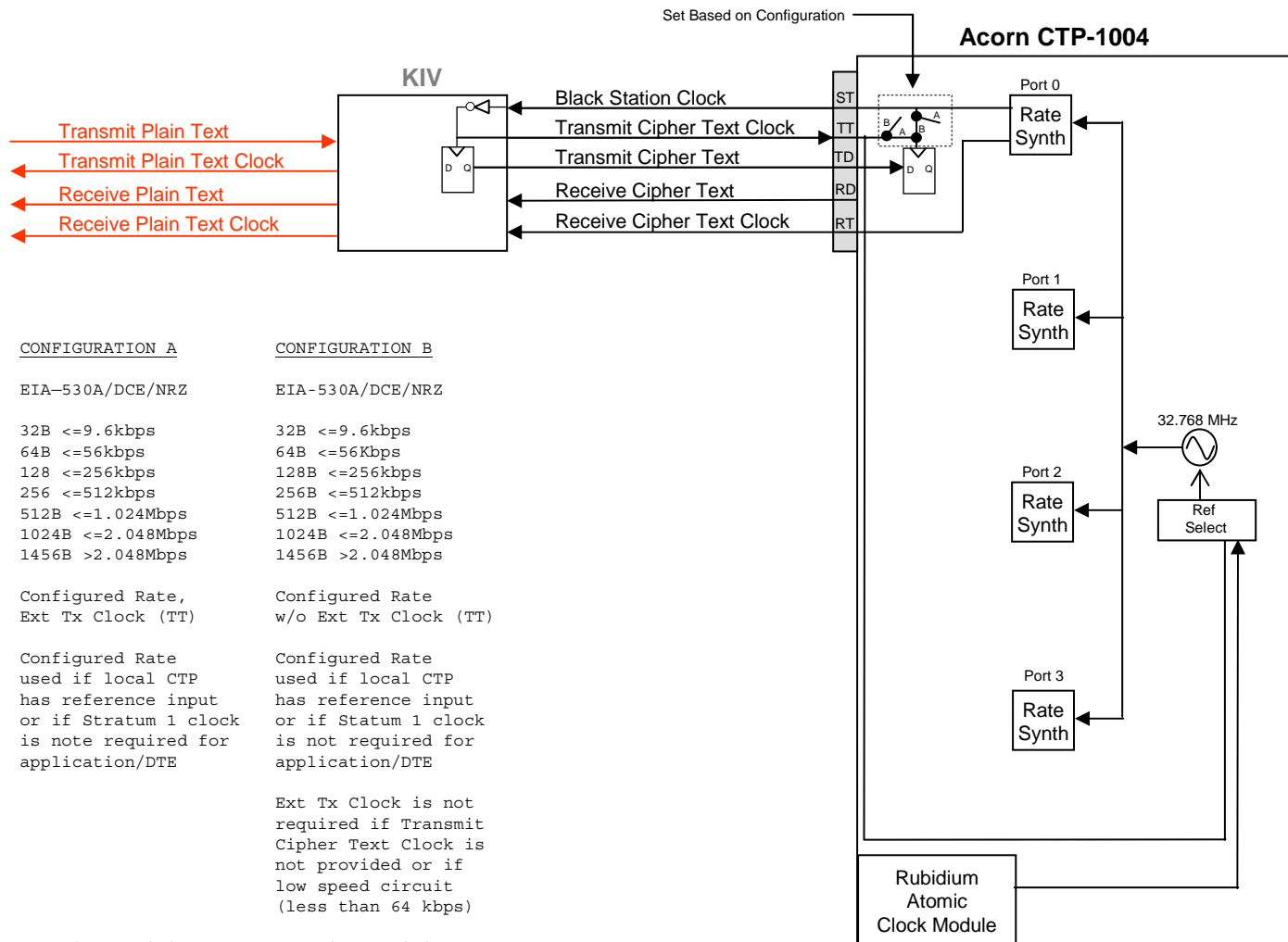
CTP Parameter	CONFIGURATION A	CONFIGURATION B
Interface:	EIA-530A/DCE/NRZ	EIA-530A/DCE/NRZ
Packet Size: (Recommended settings based on circuit Speed)	32B <=9.6kbps 64B <=56kbps 128B <=256kbps 256B <=512kbps 512B <=1.024Mbps 1024B <= 2.048Mbps 1456B >2.048Mbps	32B <=9.6kbps 64B <=56Kbps 128B <=256kbps 256B <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps
Clock Config:	Adaptive Rate, Ext Tx Clk (TT)	Adaptive Rate w/o Ext Tx Clock (TT)
Configuration Notes:	Adaptive Clock used if remote port has accurate clock and there is no reference input to local CTP unit	Adaptive Clock used if remote port has accurate clock and there is no reference input to local CTP Unit External Tx clock is not required if Transmit Cipher Clock is not provided or if low speed circuit (less than 64 kbps)
	Rate is specific to the circuit	Rate is specific to Circuit
	Buffer (Min,Set,Max) is specific to IP network performance	Buffer (Min,Set,Max) is specific to IP network performance

Acorn Packet solutions, Inc.	
Date: October 2004	Description KIV Connectivity: Acorn CTP-1004 port using adaptive clock and provides Black Station Clock
Project Crypto Docs	
Drawing No. 5	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	



CTP Parameter	CONFIGURATION A	CONFIGURATION B
Interface:	EIA-530A/DCE/NRZ	EIA-530A/DCE/NRZ
Packet Size: (Recommended settings based on circuit Speed)	32B <=9.6kbps 64B <=56kbps 128 <=256kbps 256 <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps	32B <=9.6kbps 64B <=56Kbps 128B <=256kbps 256B <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456>2.048Mbps
Clock Config:	Configured Rate, Ext Tx Clock (TT)	Configured Rate All Clocked by Ext. Clk (TT)
Configuration Notes	Port can be used for CTP clock reference if rate is 32 kbps or n x 64 kbps Configured Rate with Ext Tx Clock used if CTP has clock reference Rate is specific to Circuit	Port can be used for CTP clock reference if rate is 32 kbps or n x 64 kbps All Clocked TT locks RT clock (Receive Cipher Text Clock) to the TT input. Used if CTP is not using Clock Reference Rate is specific to Circuit
	Buffer (Min, Set, Max) is specific to IP network performance	Buffer (Min,Set,Max) is specific to IP network performance

Acorn Packet solutions, Inc.	
Date: October 2004	Description KIV Connectivity: External clock input to KIV Black Station Clock. TCTC used by CTP
Project Crypto Docs	
Drawing No. 6	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	



CTP Parameter	CONFIGURATION A	CONFIGURATION B
Interface:	EIA-530A/DCE/NRZ	EIA-530A/DCE/NRZ
Packet Size: (Recommended settings based on circuit Speed)	32B <=9.6kbps 64B <=56kbps 128 <=256kbps 256 <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps	32B <=9.6kbps 64B <=56Kbps 128B <=256kbps 256B <=512kbps 512B <=1.024Mbps 1024B <=2.048Mbps 1456B >2.048Mbps
Clock Config:	Configured Rate, Ext Tx Clock (TT)	Configured Rate w/o Ext Tx Clock (TT)
Configuration Notes:	Configured Rate used if local CTP has reference input or if Stratum 1 clock is note required for application/DTE	Configured Rate used if local CTP has reference input or if Statum 1 clock is not required for application/DTE Ext Tx Clock is not required if Transmit Cipher Text Clock is not provided or if low speed circuit (less than 64 kbps)
	Rate is specific to Circuit	Rate is specific to Circuit
	Buffer (Min, Set, Max) is specific to IP network performance	Buffer (Min,Set,Max) is specific to IP network performance

Acorn Packet solutions, Inc.	
Date: October 2004	Description KIV Connectivity: Acorn CTP-1004 with Rubidium atomic Clock used to Provided Black Station Clock
Project Crypto Docs	
Drawing No. 7	
Acorn Packet Solutions Company Proprietary	
Revision Set 2	