(Version 1.0)

[RHEA VENDORS | CHINA

CNBx MODELS PAYMENT PROJECT]

PROTOCOL FILE

[PROJECT *NUMBER: 19–RETAIL–RHEACNtsdp001]*

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Ref.	*19–RETAIL–RHEACNtsdp001*
Company	*RHEA VENDORS	CHINA*
Project	CNBx MODELS PAYMENT PROJECT
Date Issued	November 13, 2019
Item(s)	PROJECT DEVELOPMENT FILE

Version	Date	Author / Reviser	Remark
v1.0	November 13, 2019	Alfred Xu	Initial Version

Date	Modified	Description	Type	Editor	Version
November 13, 2019		Creation / Verification	A/C	Alfred Xu	v1.0

* TYPE： A – ADDED   C – CHECKUP   D – DELETED   M – MODIFIED

* File Naming Specification： PROJECT NAME _ FILE NAME _ DATE _ VERSION NUMBER

RHEA CNBx PAYMENT PROJECT PROTOCOL

I.   INTRODUCTION

1.   Server Address

1.1   Server IP address: 180.166.211.217

1.2   Server port: 6019

1.3   Description: The TCP connection timeout is 180 seconds, and the heartbeat package is recommended to be: 30 seconds or 40 seconds.

After the abnormal disconnection, check-in command (or Login Authorization) must be sent before each command can be sent, otherwise the system will force the current device to go offline - the server will automatically disconnect.
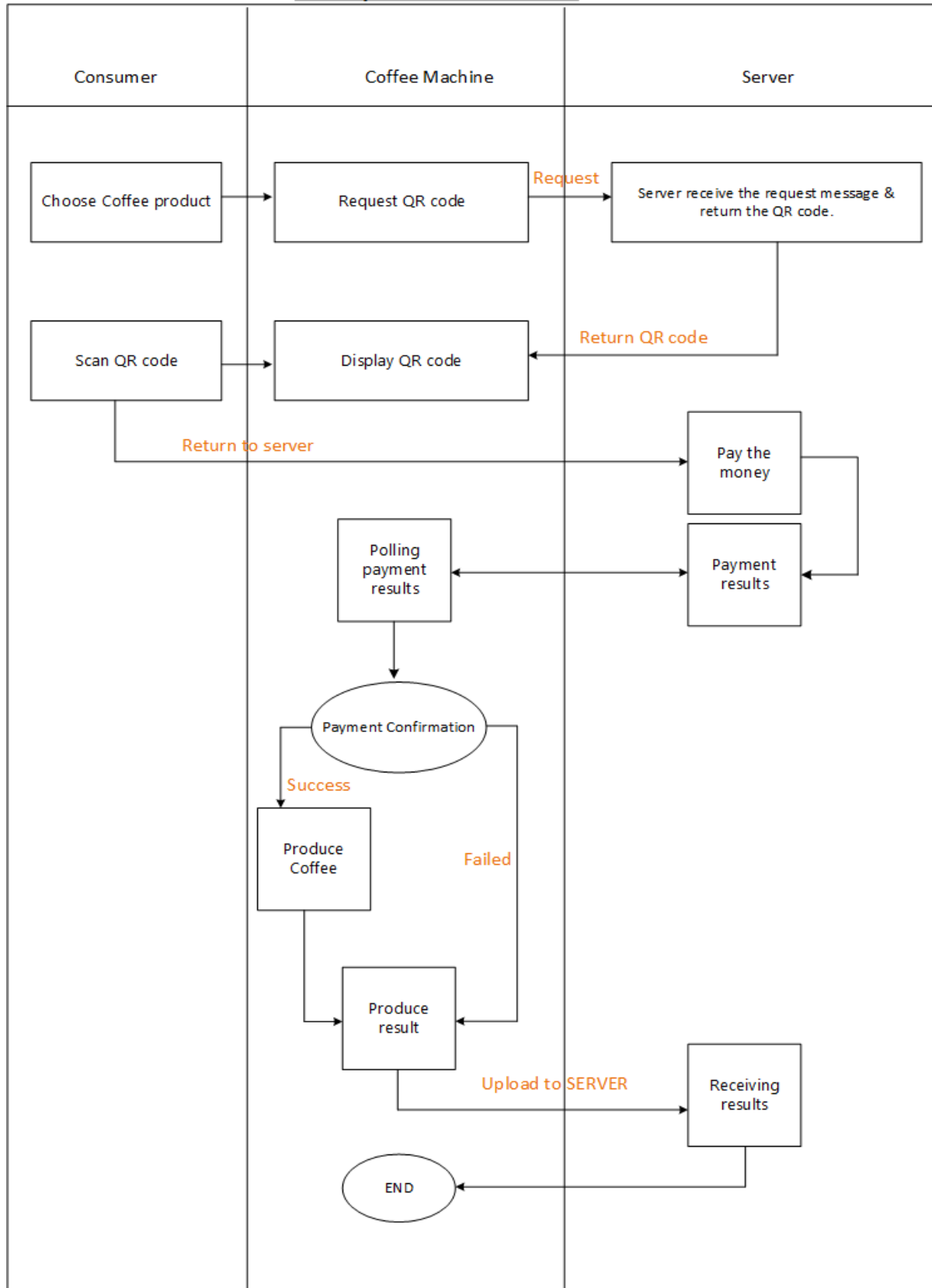
2.   Signature key

2.1   KEY: 1648339973B547DC8DE3D60787079B3D

3.   CNBx Payment Transaction Process

Please see the picture as below:

CNBx Payment Transaction Process

Consumer	Coffee Machine	Server
Choose Coffee product	Request QR code	**Request** → Server receive the request message & return the QR code.
Scan QR code	Display QR code	**Return QR code**
Return to server		Pay the money
	Polling payment results	Payment results
	Payment Confirmation	
	Success → Produce Coffee	
	Failed	
	Produce result	
	Upload to SERVER →	Receiving results
	END	

II. COMMUNICATION PROTOCOL FORMAT

HEAD			BODY	
Machine Number	Command	Time	Data......	Terminator

4. CNBx Machine Check-in

4.1 Encryption mode:MD5

4.1.1 KEY: 1648339973B547DC8DE3D60787079B3D

4.1.2 Encryption Parameter:

HEAD			BODY		
Machine Number	Command	Time	Version Number	Key	Terminator
C20190001	E11	20191029223010	V1.6	48339973B547DC8DE3D60787079B3D	#

4.2 Coffee machine check-in request

HEAD			BODY		
Machine Number	Command	Time	Version Number	Key	Terminator
C20190001	E11	20191029223010	V1.6	1D240F5E9DF0BE68B3A53373AB249B69	#

Example:

C20190001|E11|20191029223010|V1.6|1D240F5E9DF0BE68B3A53373AB249B69#

4.3 Server Return Instruction

HEAD			BODY	
Machine Number	Command	Time	Status	Terminator
C20190001	E11	20191029223012	0	#

4.4 Check-in Result

Normal: 0

Error: 1

Machine not Registered: 2

Machine offline: 3

Example: C20190001|E11|20191106200950|2#

5. Heartbeat Instruction

The heartbeat package is recommended to be sent once every 30 seconds or 40 seconds to ensure normal connection.

HEAD			BODY	
Machine Number	Command	Time	Status	Terminator
C20190001	E12	20191029223010	0	#

Example: C20190001|E12|20191029223010|0#

5.1 Server Response Instruction

HEAD			BODY	
Machine Number	Command	Time	Status	Terminator
C20190001	E12	20191029223012	0	#

Example: C20190001|E12|20191029223012|0#

6. Consumer Selection

6.1 QR Code Request Instruction

HEAD			BODY			
Machine Number	Command	Time	Product Name	Product Number	Price	Terminator
C20190001	E13	20191029223010	Latte Macchiato	12	3.5	#

Price unit: RMB, Yuan 元

Example: C20190001|E13|20191029223010|Latte Macchiato|12|3.5#

6.2 QR Code Request Response Instruction

HEAD			BODY				6
Machine Number	Command	Time	Order Number	Countdown (Seconds)	QR Code Address	Payment Method	Terminator
C20190001	E13	20191029223010	20191029224 01366789	60	http://xxx.xxx. xxx.xxx/ qr/code	Wechat* Alipay* Unionpay QR Code	#

Example:

C20190001|E13|20191111201427|C2019000120191111201426584|https://qr.
95516.com/48020000/3154191111111427205299235|Wechat*Alipay*Unionpay
|#

6.3 Server Response Instruction

HEAD			BODY	
Machine Number	Command	Time	Status	Terminator
C20190001	E13	20191107083906	EE	#

Example: C20190001|E13|20191107083906|EE|EE#

Note: When the server replies that the returned result is EE, it indicates that the QR code generates an exception.

7. **Order Status Inquiry**

7.1 Order Status Polling Instruction

HEAD			BODY	
Machine Number	Command	Time	Order Number	Terminator
C20190001	E14	20191029223010	2019102922401366789	#

7.2 Request Instruction

Example: C20190001|E14|20191029223010|C2019000120191111201426584#

7.3 Test Address (Actual test address, TEST ONLY !!!)

http://180.166.211.217:6018/mpos/setOrderState/订单号/订单状态
http://180.166.211.217:6018/mpos/setOrderState/C20190012019111201426584/3

Note: 订单号 = Order Number   订单状态= Order Status

7.4 Server Return Instruction

HEAD			BODY		
Machine Number	Command	Time	Order Number	Order Status	Terminator
C20190001	E14	20191029223010	2019102922401366789	3	#

Order Status Description:

Order Initialization: **1**

Consumer has Scanned QR Code: **2**

Payment Succeeded: **3**

7.5 Server Response Instruction

Example:
C20190001|E14|20191111201904|C20190012019111201426584|3#

8. Order Delivery Status Upload

HEAD			BODY		
Machine Number	Command	Time	Order Number	Delivery Status	Terminator
C20190001	E15	20191029223010	2019102922401366789	0	#

Order Upload:

Order Delivery Success: **0**

Order Delivery Failed: **1**

Order Delivery Timeout: **2**

8.1 Request Instruction

Example:
C20190001|E15|20191029223010|C20190012019111201426584|0#

8.2 Server Return Instruction

HEAD			BODY		
Machine Number	Command	Time	Order Number	Receiving Status	Terminator
C20190001	E15	20191029223010	2019102922401366789	0	#

Receiving Status:

Success:	**0**
Failed:	**1**

8.3 Server Response Instruction

Example:
C20190001|E15|20191111202853|C2019000120191111201426584|0#

Note: When the server returns to receive status 1, the coffee machine needs to save the

data until the upload is successful.

END.