ApexECR Hardware Integration Checklist

1. Network & Connection Verification

- ☐ **IP Address Alignment:** Verify the ECR terminal's IP address and Port exactly matches `AppConstants.apexEcrBaseUrl` (e.g., `http://192.168.1.100:8000`).
- ☐ **Kiosk Network:** Ensure the Android Kiosk and the ECR Terminal are connected to the exact same Wi-Fi network/LAN subnet router.
- ☐ **Firewall/Port Blocking:** If it times out instantly, check if the Kiosk tablet has a built-in firewall blocking port `8000` (or whatever port the device uses).

2. Credential Verification

- ☐ **Correct Values:** Replace the placeholder `Tid` , `Mid` , and `SecureKey` in `constants.dart` with the actual ones provided by the bank/Apex.
- ☐ **Currency Code:** Confirm with them if the currency code for Bahraini Dinar they expect is specifically `400` or something else like `BHD` .

3. The First "Test Sale" Payload Check

- ☐ **SOAP formatting:** When you fire the very first `$1.00` test transaction, watch the `flutter logs` . If `ApexEcrController` logs a `Network Error: 400 Bad Request` , it means the ECR terminal expects the strict WSDL SOAP Envelope (the `xmlns:soapenv` wrappers).
- ☐ **Timeout:** Does the terminal light up immediately when you click checkout? If it takes more than 5 seconds to wake up the terminal, the network connection is weak.

4. Kiosk Workflow Validation

- ☐ **Payment Success (`PosRespStatus == 1`):** Complete a successful payment on the terminal. Check the Syrve Portal immediately to ensure the order generated correctly and that it is fully paid.
- ☐ **Payment Declined (`PosRespStatus == 0`):** Intentionally use a declined/empty card or hit "Cancel" on the terminal keypad. Verify that the Flutter Kiosk stays on the "Order Processing" screen, shows "Payment Failed", and does **NOT** fire the `createOrder` command to Syrve.
- ☐ **Device Disconnected:** What happens if someone unplugs the terminal mid-transaction? Verify the 30-second Dio `receiveTimeout` catches it and the UI gracefully recovers without crashing.

5. Peripheral Testing

- ☐ **Receipt Printing:** The models are currently set to `enablePrintPosReceipt: 1` (Merchant Copy). Does the physical terminal actually print the paper? Do you need `2` for Customer copy or `3` for both?
- ☐ **Invoice Numbers:** We are generating a random 6-digit invoice number right before `processSale` . Does the receipt accurately show this number?