

# Chapter 1

## Design Issues

### 1.1 Constraint issues

### 1.2 Function issues

- Supported jpeg format files.
- Capture photo or streaming video.
- The serial output data is a common connection.

### 1.3 Realtime issues

- The system is soft-realtime, but the latency allowed must be smaller than 500ms.

### 1.4 Concurrent issues

- The system can be active in any environment, but not too hot and humid, e.g the drone system.
- Muti-function: The system can capture images, processing and transmit them at the same time.
- Because of using Uart output connection, the system can easily connect to another system.

### 1.5 Reactive issues

- Discontinuous interaction: Power on demand.
- Response to external non-periodic events: Can start or stop capture images at any time.