

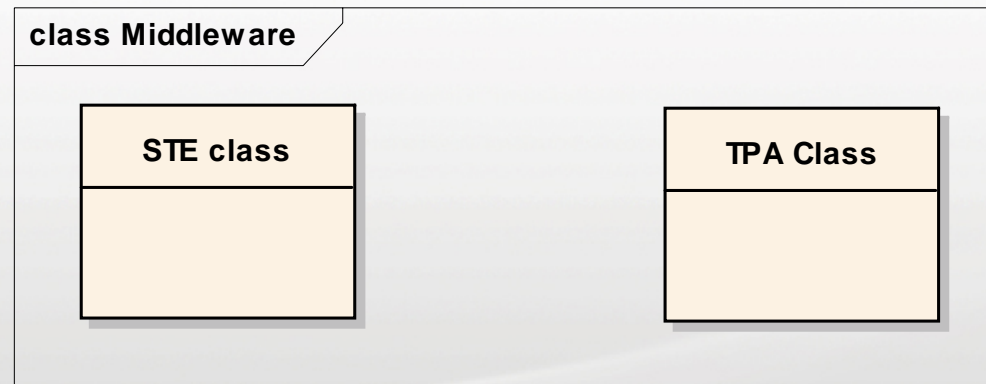
Architecture of platform tool

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2008/04/23

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Implement the platform functions for Motorola

1. Must be clear to define the request.
2. Must be easy to debug.
3. Must be keep the future functions.
4. Must be able to complete the division.



Analysis

Each function has the same logic part.

1. Preprocess of the data to be command to comport
2. Send then data to comport
3. Wait and receive the data from comport
4. Process the data to be output

class RequestManager

This is request manage dll, it'll manager all of comport and make sure it's thread safe.

Export function

```
/*
IRequestManagerPtr is a smart pointer of IRequestManager
*/
bool GetIRequestManager(IRequestManagerPtr& ppIRequestManager,int nComPort);
```

IRequestManagerPtr

Interface

IRequestManager

```
+ Open(int) : bool
+ Close(int) : bool
+ ExecuateRequest() : bool
+ IsOpen() : bool
```

It is a singleton,
but it must make
sure be thread
safe.

SerCommLib

```
+ Open() : void
+ Close() : void
+ Read() : void
+ Write() : void
+ GetState () : void
+ TXRXinDiag() : void
+ TXRXinDI () : void
+ TXRX() : void
+ DLSend() : void
+ ChangeToDiagMode() : void
+ ChangeToDLMode() : void
```

RequestManager

```
- m_SerCommLibs: SerCommLib[]

+ Open(int) : bool
+ Close(int) : bool
+ ChangeMode(int) : bool
+ DispatchRequest(RequestBase, int) : void
+ IsOpen(int) : bool
```

RequetManagerInstance

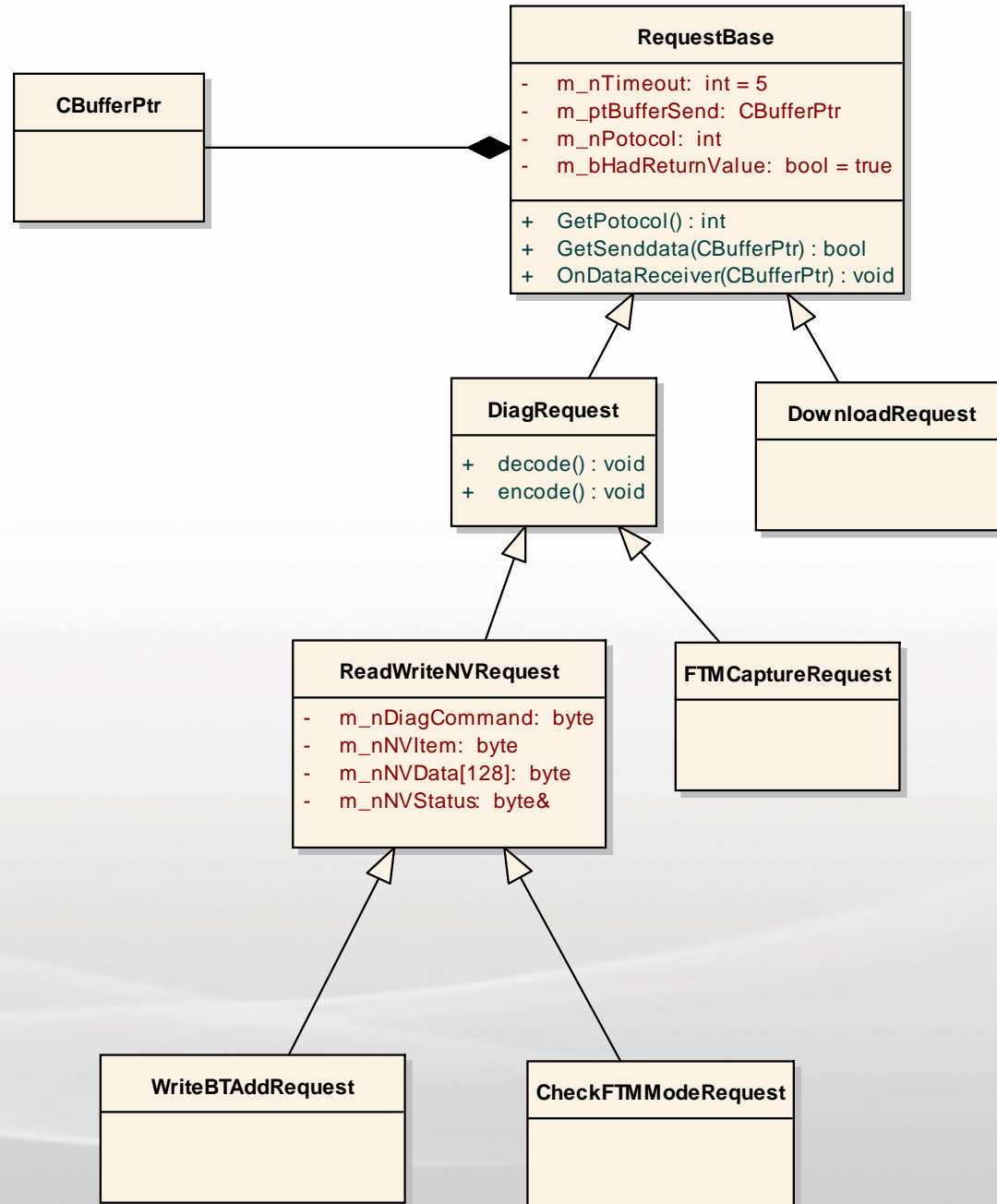
```
- m_nPort: int
- m_pRequestManager: RequestManager

+ Open(int) : bool
+ Close(int) : bool
+ ExecuateRequest() : bool
```

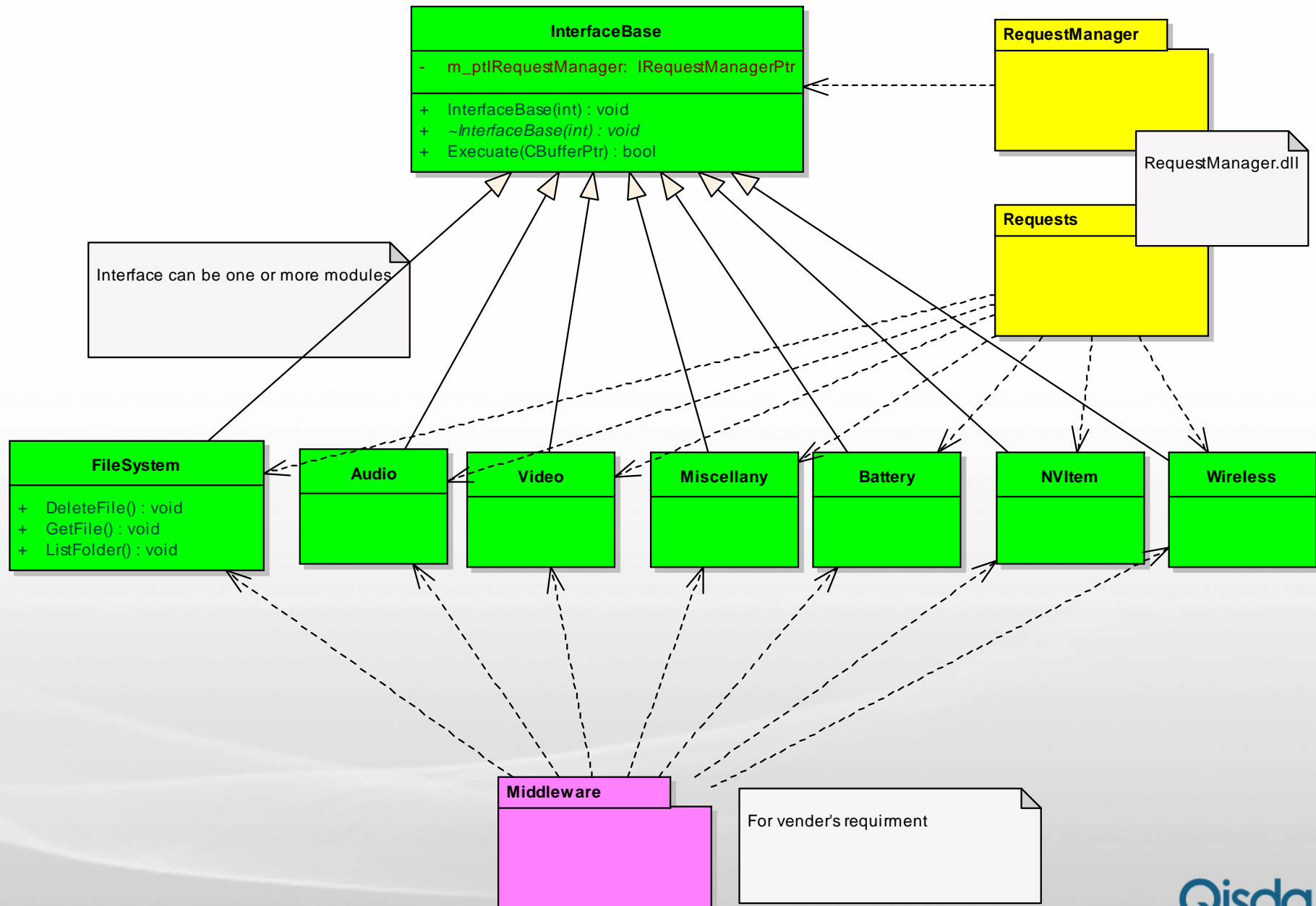
Execuate function:

- 1.Preprocess of the data to be command to comport
- 2.Send then data to comport
- 3.Wait and receive the data from comport
- 4.Process the data to be output

class Requests



class System



Schedule (include unit test)

- Request manager
 - ▶ Request base and (1 Day)
 - ▶ Request manager (1 Day)
 - ▶ Interface base (1 Day)
- Interfaces and requests
 - ▶ Need dispatch functions first for schedule (? Day)
 - ▶ File system
 - ▶ Audio
 - ▶ Video
 - ▶ Battery
 - ▶ Miscellany
 - ▶ NV Item
- Middleware
 - ▶ Pending on interfaces
 - ▶ STE
 - ▶ TPA

Quality
Innovation
Speed

Qisda