

## Project RUBY: M0 Declaration

Sub-project: BaseBand  
(including MMI, Camera, Acoustics,  
Battery, Power-Management)

Sub-project manager: Kranzer

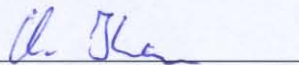
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### M0 is hereby declared

Date

Sub-project manager

KRANZER



22.2.06

*Display* (HAYN)

*Camera* (RASMUSSEN)

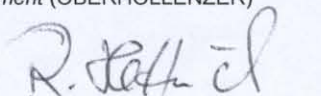
*Acoustic* (LORENZ)

*Battery* (LIEBENOW)

*Power Management* (OBERHOLLENZER)

Line Manager

HETTRICH



22.02.06

## M0 Digital Hardware Checklist for the Declaration

Digital and mixed signal HW		Completed on: Initials and Date
1	Project leader HW (PL HW) / part project leader (PPL dHW) has been designated by the department head	✓ done
2	Detailed Primavera project plan from M0 to M1 showing dedicated resources by name is available.	✓ done
3	Rough Primavera project plan from M1 to M3/S4 showing dedicated resources on department level is available	✓ done
4	Acoustic concept available and acoustic components defined.	○ see Remark 1
5	Assembly concept for mechanical design dependent components or modules coordinated and agreed with MD, EA and RF (e.g. display, camera, acoustics, vibra, battery, card readers, IrDa, LED flash, connectors, etc.)	✓ done
6	Product requirements as specified in the M0 document achievable with available technologies / know-how by the specified S3 HW deadline	○ see Remark 2
7	Product relevant pre-/component developments defined. Time schedules and deliveries aligned to product development schedule	○ see Remark 3
8	Second solutions and requirements to multiple sources agreed with Strategic Procurement	✓ done with APE (Rodolphe Beaugeard)
9	Platform released for start of product integration available i.e. platform master schematics, porting guide etc.	✓ done (see Remark 4)
10	First circuit schematics extracted from master schematics	✓ done
11	Platform features/configurations supported by product agreed with PL SW	○ see Remark 5
12	Product related deviations from the platform defined and agreed with involved parties i.e. SW, MD etc.	✓ done
13	RF / base band interface defined (timing diagrams, description of the radio signals) (This checkpoint shall apply only for products which are not derived from platforms developed according to the new Platform Process V 2.0 and the corresponding platform checklist MRPlatD)	✓ done (see Remark 6)
14	Accessories interface defined / specified and agreed between AD, MD and HW (This checkpoint shall apply only for products which are not derived from platforms developed according to the new Platform Process V 2.0 and the corresponding platform checklist MRPlatD)	✓ done
15	Product related Technical Terms of Delivery (TTD) are available (This checkpoint shall apply only for products which are not derived from platforms developed according to the new Platform Process V 2.0 and the corresponding platform checklist MRPlatD)	✓ done (see Remark 7)
16	Hardware / Software interface and function description coordinated (hardware description and list of requirements on the software, port pin list are available) (This checkpoint shall apply only for products which are not derived from	✓ done (see Remark 8)

Remark 1:

Speaker decision not yet finally fixed. Current assumption is to use Philips speaker because of it's small size and lower impact on antenna performance compared to the X75 speaker. It has to be ensured that the Philips speaker can be sealed air tight.

Remark 2:

Remark referring to M0 document "Ruby\_M0\_Document\_v0.2\_2006.02.17.ppt":

HDD density dependent on density available on the market at that time.

Standby-,Talk-, MP3 Playback-time can not be confirmed because no current consumption data of new QCT chipset available yet. At the moment only rough estimations derived from older chipsets are available.

Instead of EL-foil LEDs will be used for side-keys.

Remark 3:

-HDD: Integration concept not fixed yet, several possibilities using different interface ICs are under discussion. Hardware components e.g. HDDs, EPSON V17 IC or SMSC 2100 interface chip would fit into the project time schedule, but detail discussion are ongoing if and when SW is able to support these solutions! This is seen as a high risk.

Concept needs to be included in B1 prototype latest. PCB area for these components reserved in A1 layout.

-Touch screen: Performance (transparence and resolution of sensor) and mechanical concepts are dependent from the suppliers. Feasibility is not confirmed by all suppliers yet. Maybe impact on UI concept may occur if TPK needs to be chosen, because they offer only 21 fixed keys.

Remark 4:

Platform master schematic available. Platform evaluation board is not available yet therefore less experience up to now. Maybe changes will occur which might affect also RUBY but this is not seen as critical.

Remark 5:

HDD concept is still under discussion

Remark 6:

BB-RF interface is based Qualcomm platform solution.

Remark 7:

TTDs are available at least in a draft status.

Remark 8:

Hardware description will be a block diagram.

List of requirements on the software is based on KOALA requirements plus requirements for the additional components such as HDD and Touch screen. Details to be defined until S0.

Port Pin list will be available.