

M1: SCM TLM LCM 3 Milestone

Product: Obsidian

LCM 3 Production Technology
 Management

Mr. Schulte

Date:

7.3.2006

Sign:

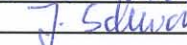
LCM 3 Production Technology
 Management
 Project Manager

Mr. Schwarz

Date:

07.03.2006

Sign:

**Herewith the M1 LCM 3 - Milestone is**

declared



declared with restrictions



is not declared



LCM Lifecycle Management

Mr. Dörne
(or substitute)

Date

25

Sign

**Comments:**

Provider/Operator Logo is located only on the Displaylens. The Displaylens is a assembly part and will be assembled from the inner side into the Uppercase in our production line. We have no standard No-ID concept, we are able to built to order (spread point in house)

Distribution List:

PL Project Manager

Mr. Stokholm

CCQ Product Quality

Mr. Sondergaard

BA C

Mr. Theiler

(w/o attachments)

LCM1

Mr. Machill

Attachment:

General Information

Milestones

	Target	Reached
M0	25.11.2005	02.12.2005
S0	23.12.2005	03.02.2006
M1	03.03.2006	
S15	10.03.2006	
S2	18.05.2006	
S25	17.07.2006	
SD-S3	17.08.2006	
S3	18.08.2006	
PS	01.09.2006	
DS	08.09.2006	
SD-S4	19.10.2006	
S4	19.10.2006	
SD-M3	19.10.2006	
M3	19.10.2006	

Planned Prototype Runs

Tape out	Main	MMI	FPC	
A1	07.12.2005	- / -	n.a.	done
B1 fast	13.02.2006	03.02.2006	n.a.	
B1 main	17.03.2006		n.a.	
B1+	10.05.2006	10.05.2006	n.a.	
B2	04.07.2006	28.06.2006	n.a.	
Pilot	cw34/35		n.a.	
Prototype run date	Board	Phone	Quantity Board / Phone	
A1	cw51	- / -	151 / 0	done
B1 fast	01.03.2006		120 / 0	
B1 main	31.03.2006	07.04.2006	655 / 635	
B1+	29.05.2006	09.06.2006	1.606 / 1.444	
B2	19.07.2006	26.07.2006	2.303 / 2.202	

Volumes / Sites

Site	Peak Vol.	RU Date	Transfer Date
Klf	192k	cw36	
SSMC	40k	cw45	cw42
Man	55k	cw44	cw41

Life cycle volume: 2'155 Mio.

Max. peak/month: 287k (additional 30% upside potential planned)

Delivery start: Sept. 2006

Checklist acc. to MEP

	Yes	No
Project plan in Primavera on work-package level until M3 showing dedicated resources by name	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Milestone planning is in accordance with prototype runs, PTR, FRT, ramp up plan and ramp up volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed realization plan for new product technologies is available	1) <input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed realization plan for new production technologies is available	2) <input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed calculation for process times, special tooling cost and F1 hours are available	3) <input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed production process flow layout is available	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed production process quality targets are available	4) <input checked="" type="checkbox"/>	<input type="checkbox"/>
Committed result out of production and test workshop is available	3) <input checked="" type="checkbox"/>	<input type="checkbox"/>
Part declaration PT is available	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1) a) New RF-solution in use (Bright 6 PLA), status from predecessor Bramling (RF adjustments) available, A1-run Obsidian in cw51 successful done b) PVD coating in use (surface of plastic parts), status from pre-development available (predecessor Quail), suppliers selected. Share will be PVD 30% and painting 70%		
2) No new production technologies in use		
3) Update calculation of test times based on the Production/Test Technology Workshop from 10.01.2006. Update assembly concept with impact of Displaylens assembly in production. Action Items defined and addressed to R&D		
4) Quality targets 05/06 available (KPI sheet)		

Checklist internal

Yes No

Availability of resources LCM3 are secured until SD-S4

☒ ☐

List of restrictions, open points and action items have been defined

3) ☒ ☐

Production targets in performance description included

☒ ☐

PT action items addressed to PD team are committed and listed in the PD team minutes

☒ ☐

Ramp up categorie is fixed and line set up time for new tasks is committed

☒ ☐

	ramp up categorie	days
SMT	2	n/a
SMT2	2	n/a
Assembly	2	n/a
A2T	2	start in B1+
Config	2	n/a

Info / Attachments

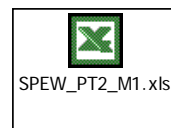
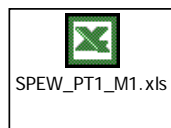
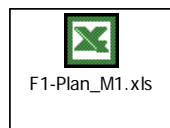
New Product Technologies

Technology	Status	Owner
Bright 6 PLA (new RF solution)	predecessor Bramling (RF adjustment available)	PT2
PVD Coating (surface of housing parts)	in qualification (new)	PT1, PT2 (handling)

New Production Technologies

Technology	Status	Owner
TransFlash card reader (Micro-SD)	qualified with Swift	PT2
Nano I/O connector	qualified in 85-Gen.	PT2
Assembly of Displaylens (ID part) from inner side into Uppercase	in qualification	PT1

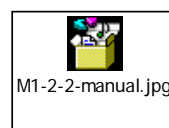
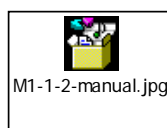
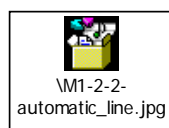
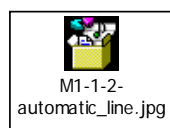
Process times / Special tooling cost / F1 hours



Production process quality targets



Production process flow



Action Items

Action / Status	Owner	Date
Production of MMI-Board at BenQ/KLF side under investigation. Start with MMI supplier Leipzig, lead project in parallel for MMI at BenQ side under investigation	PT1+2 / LCM3	S0 done
No-ID concept must be agreed until S0 ID part: Displaylens (assembled into UC)	PT1 / LCM / PM	S0 done
Alignment of Displaylens assembly from inner side into Uppercase in production line for manual and automatic line	PT1	M4 done
Handling of PVD/high glossy coated parts/device in production and impact for assembly/test fixtures/packaging (P-FMEA)	PT1 + PT2 (QM CI)	S2 (B1)
Qualify TransFlash card reader (Micro-SD) contacting • Define blocking area around TF reader. • Qualify centering mechanism of contact block.	PT21	A1 done S2 (B1)
• Qualify RFT SW 90 % Testcoverage reached after A1 run PER_LIGHT_PWM to be changed VBOOST to be changed SLI LED to be changed FM RADIO new	PT21 R&D AAL DHW R&D AAL DHW R&D AAL DHW R&D AAL DHW + PT21	done S15 S15 S15 S15
New Test Cases implemented for A1: • Qualify VCXO with integrated varactor diode • AM Loop adjustment • TX-IQ offset cancellation	PT21 PT21 PT21	S2 (B1) S2 (B1) S2 (B1)
Process Qualification of A2T line in Process Center up to B1+ run must be aligned, target is to have the SPEW-Satz in cw 22 for B1+	PT1 + PT3	S15
Repair concept must be finalized with MD, status: use of standard tool to re-snap the hooks in the middle of the phone (damage not excluded)	PT1, MD	S2 (B1)
SLI (Service Light Indicator) Testcase under investigation in CAM or CT, additional testtime has to be considered.	PT2	B1+