



#### Project Agila (TPE)

Nov 2018: L.Camson / L. Biocarles



## **Presenters** 9:30AM Every Wednesday

Team Names	Name	Organization	Date to Present
Team Vision	Arlene Ona/Judy Hugo	Singulated Test	Aug 15
	Marissa Alcalde/Marshid Delacruz	Process Engineering	Aug 15
Team Fearless	Ferdie Manalili	Scan	Aug 22
	Laline Atienza / Mark Siaga	Process Engineering	Aug 22
	Bhal Del Mundo / Jison Ognita Warehouse		Aug 22
Team Tenacious	Rolando de Juan	Equipment Engineering	Aug 29
	Eduardo Palmos	Hardware Engineering	Aug 29
	Dennis Meneses / Jason Aguilar	MIT	Aug 29
Team Vitality	Lester Uy / Bobby Tovera / John Paul	Quality	Sep 5
	Joel Villanueva	QS , Trainining , DCC	Sep 5
	John Lemuel	IS	Sep 5



## **Presenters** 9:30AM Every Wednesday

Team Names	Name	Organization	Date to Present
Team High Flyers	Rosalie Sander	PC	Sep 12
	Jane Cadiz / Mark Pecana	IE	Sep 12
	Larry / Luther / Joey	TPE	Sep 12



## **Team High Flyers**



**Presenters:** Salie, Larry/Luther, Maria Jane/Mark

Groups: PC, TPE, IE

Date of first presentation: September 4

Eagles can fly up to an altitude of 10,000 feet, but they are able to swiftly land on the ground. At 10,000 feet, you will never find another bird. If you find another bird, it has to be an eagle.

- Rises above the rest
- Not a pigeon: Doesn't grumble or complain
- Always looking for the next opportunity to strike
- Can glide with the currents of the storm
- Problem solver
- Loves to take on new challenges
- Gets people out of their comfort zone because you can't grow when you're comfortable

You cannot fly like an eagle with the wings of a wren. –William Henry Hudson



## **Agenda**

#### **FUNCTIONAL TEAM**

#### **ACCOMPLISHMENT**

Progress Report: What Has already been done to align the factories?

#### **ACTIVITIES**

- A Day in the Life (Detailed Activities)
- Benchmarking
- Organizational Alignment
- Metrics and KPIs
- Reporting
- Tools and Methods
- Specifications
- Project Jeepney Open Items

#### **ACTION PLAN**



# **Team Vision Counterparts**

**Meeting Frequency:** Monthly

Meeting Day: 1st week of the month

**Team Leader:** Luther / Larry

Function	MPHL	MTAI
TPE	Luther / Larry	Suwit R. / Sophat C. Paisan T. / Pakpum N. Suwat P. / Pongpan I.



# A Day In the Life

#### A Day In The Life

Product Engineer			Frequency				
Activities	Details	Daily	Weekly	Monthly	Yearly	Ad Hoc	
Setup not pass - Product related -disposition	After product tech's validation	Х					
Setup not pass - TP info issues - disposition	After product tech's validation	Х					
Run golden units	Used as reference unit					Χ	
Run calibration units	Depending on the device					Х	
Low yield - disposition product/test program		Х					
Low yield - disposition process related	Collaborate with Process Engr					Х	
FT insertion - 100% yield(exclude VM/Loss)	Collaborate with Process Engr					Х	
O/S yield > O/S CTRL yield - disposition	For valid O/S defect, disposition will be on NCRB	Х					
QC/QA rejects - disposition		Х					
Maintain known product issue disposition guideline				Х			
Wrong test information disposition	For Mphil	Х					
Test program/software problem disposition				Х			
Tester/handler correlation problem disposition	Provide verification procedure. Depending on the device.		Х				
Assembly related disposition					Х		
Untested/Mixed devices disposition	Collaborate with Process Engr				Х		
FT yield monitor and improvement	Monitoring is done weekly, the improvement is done on quarterly basis		Х	Х			
Lot on hold cycle time improvement			Х				
QC LRR monitor / improvement	Monitoring is done weekly, the improvement is done depending on the priority and volume of the device		Х				



# A Day In the Life

Activities	Details	Daily	Weekly	Monthly	Yearly	Ad Hoc
Customer feedback - product related	collaborate with QA Engr			Х		
Engineering lot				Х		
Misbinning (Test program related)					Х	
Correlation units - Generate new sets	Process Engg responsibility					Х
Correlation units - Maintenance and HW spec	Process Engg responsibility					Х
Test Load / DUT Board schematic change	Collaborate with HW Team				Х	
New LB release				Х		
HW Design/assembly	TE's responsibility					Х
Provide verification tools / sockets					Х	
Test program update and release				Х		
Transfer release test program to production drive				Х		
Test Platform conversion	being done quarterly (from old - Eagle - Spea (strip)				Х	
Test time / insertion reduction	being done quarterly				Х	
Flexcell/NPI checklist genration and release					Х	
FT Tester qualification	System Group's responsibility					Х
FT - QC electrical report (Weekly)	Collaborate with Process Engr					Х
FT - QC Assembly Quality report (Weekly)	Collaborate with Process Engr					Х
FOI-SCAN Quality report (Weekly)	Collaborate with Process Engr					Х
Lot on hold disposition procedure/training	Collaborate with Process Engr					Х
FT Spec update						Х
FMEA update						Х
Control Plan update						Х
8D report						Х



# Benchmarking

	Atmel			4	7,	
TPE Tasks	From (RFA):	From (MCU):	Owner	То:	Owner	Status
Product database	HNO Databank	SJO Databank	Line Sustaining	Baan/PDC	TPE / BU	100% Integrated
Test Process Flow	Databank	Device Management Tool	Line Sustaining	Baan/PDC	TPE/BU	100% Integrated
Test Setup	Sorter Map	Device Management Tool	Line Sustaining	Baan/PDC	TPE/BU	100% Integrated
Special Flow	Work-I	Work-I	BU/PE	Baan/PDC	TPE/BU	75% Integrated
Test Time	HNO Databank	SJO Databank	PE / Line Sustaining	СМ	TPE	100% Integrated
LOH and Disposition	NCM / WS	NCM / LTS	Line Sustaining	PPO / MES	TPE/PT	100% Integrated
MRB	NCM	NCM	BU / PE / Line Sustaining	NCRB	PT/TPE/BU	100% Integrated
Change Notice	CRS	CRS	BU/PE	eCN	TPE/BU	100% Integrated
Test Program Control	Network Folder	CVS, TRS, TMP, Network Folder	Line Sustaining	mchpSVN	TPE/BU	75% Integrated
Yield Report	FabTime / GTE Portal	GTE Portal	BU/PE	BEWeb	All	90% Integrated
Control Yield	Databank	Device Management Tool	Line Sustaining	MES	TPE	100% Integrated



## As TPE, what do we need?

Baan account; iTurf request



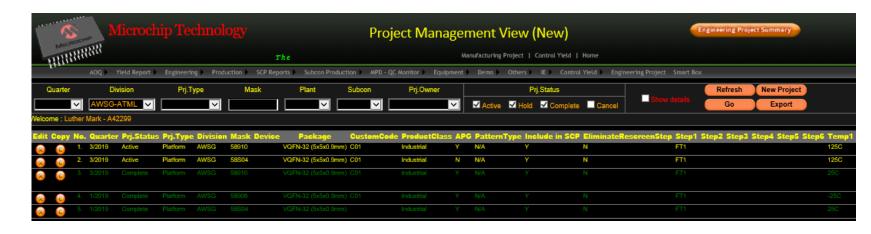
MES account (PE); iTurf request



- PPO account; IT request
  - The same as Reporter8's user
- CM, eCN, BEWeb account; IT request
  - The same as windows user

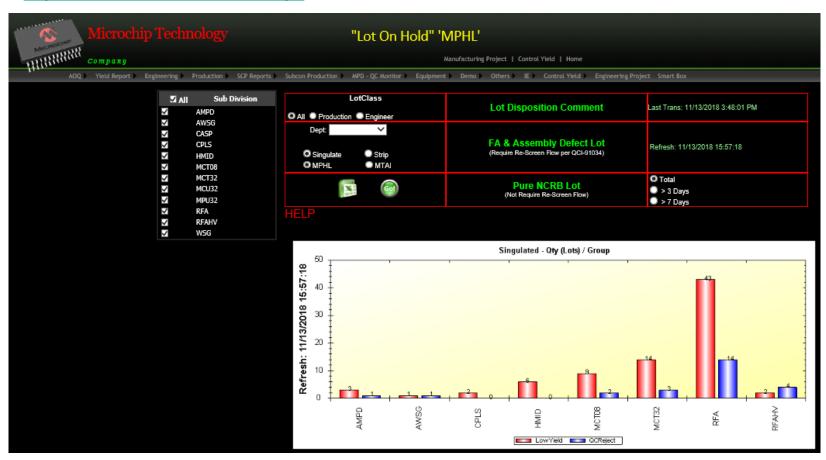


- Project Management View
  - http://beweb/mtai/ProjectManagement.aspx



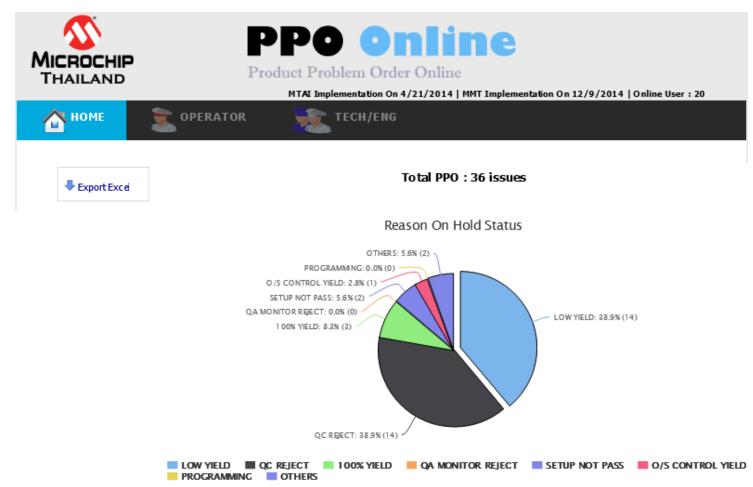


- LOH (MPHIL: MES)
  - http://beweb/mtai/LotOnHold.aspx





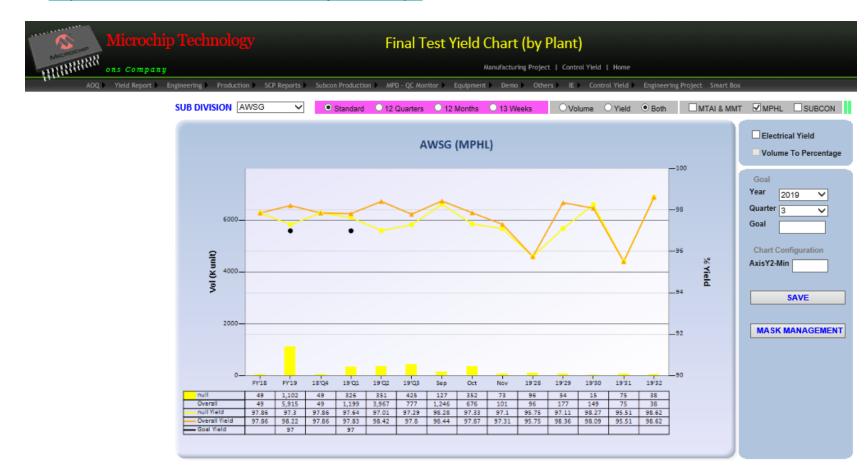
- LOH (MPHIL: PPO)
  - http://ppo/





#### FT Yield

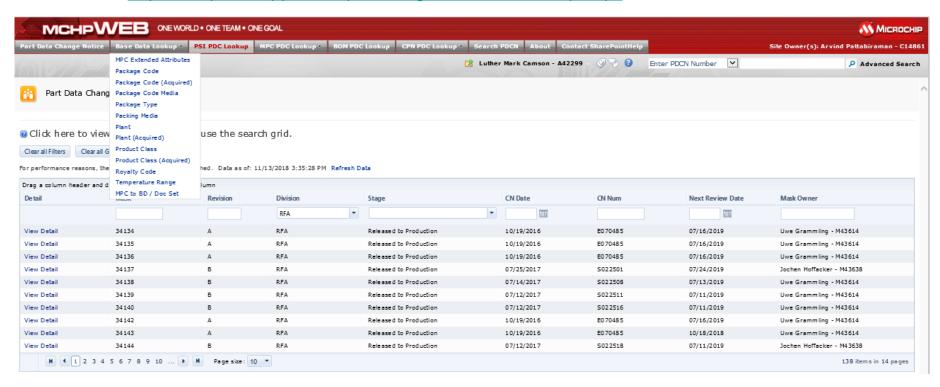
http://beweb/mtai/FinalTestYieldByPlant.aspx





#### PSI PDC Lookup

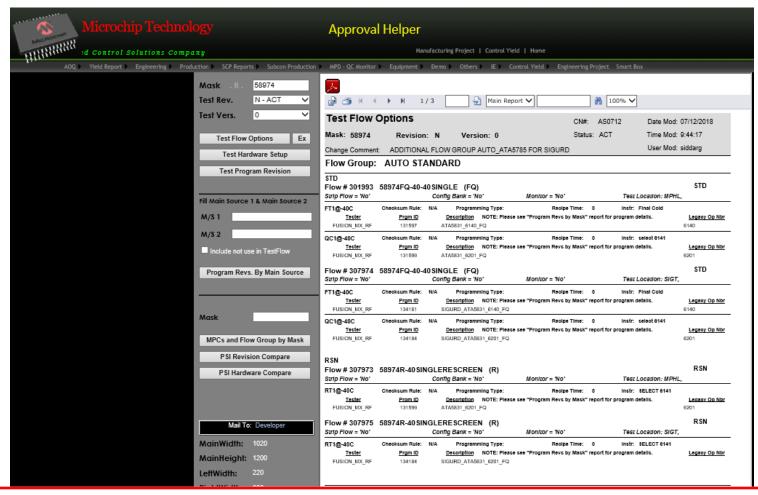
http://mchpweb-apps/dms/pdcn/Pages/PSI%20Lookup.aspx





#### PSI Approval Helper

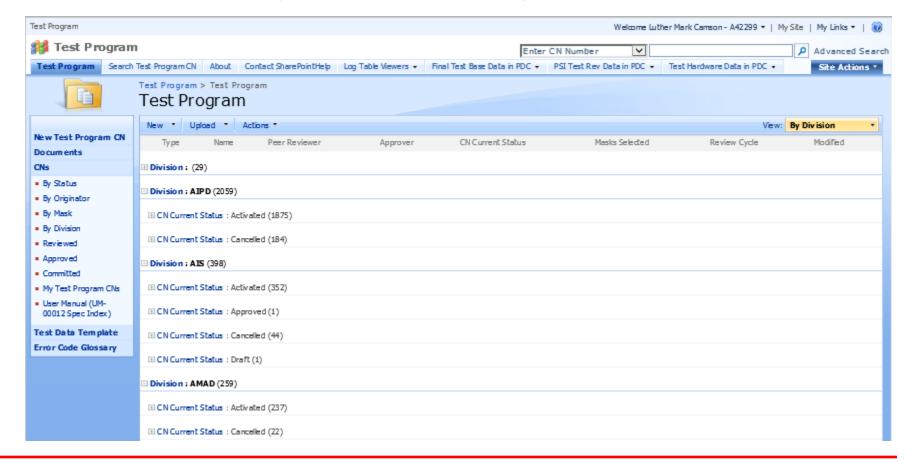
http://beweb/mtai/BaanApprovalHelper.aspx





#### Test Program CN

- TP release
- http://microchipweb/pages/dms/Document%20Management%20System/toolsandresources

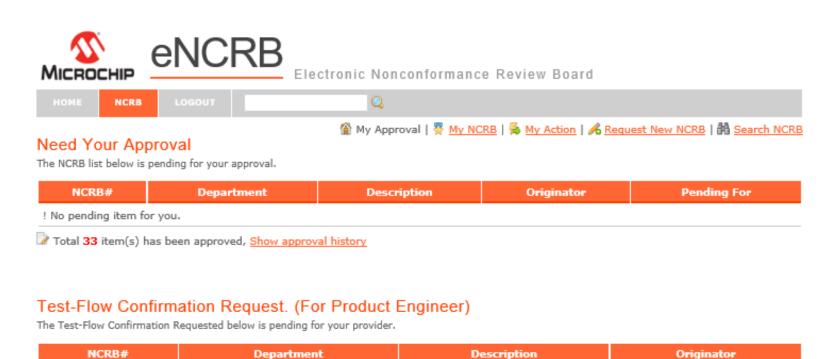




#### eNCRB

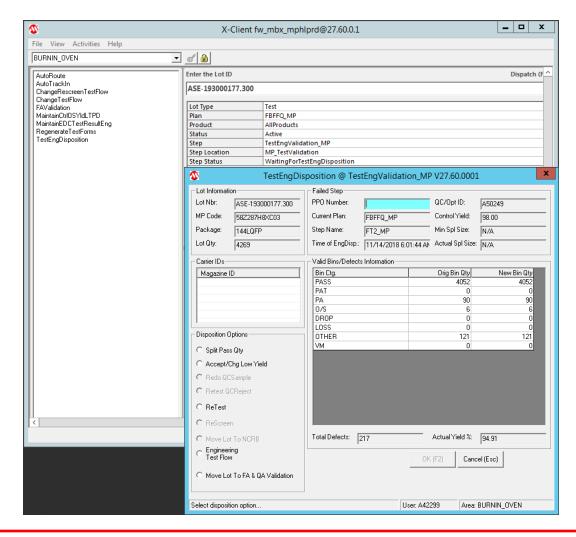
http://mth-sv-qaapp/ncrb/login/index

No pending item for you





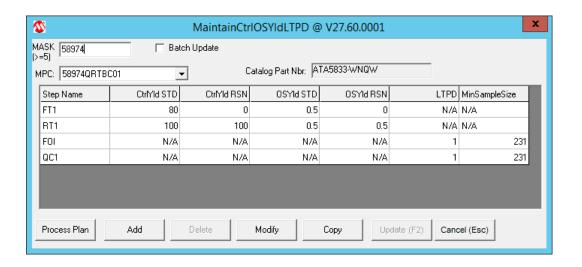
MES LOH Disposition





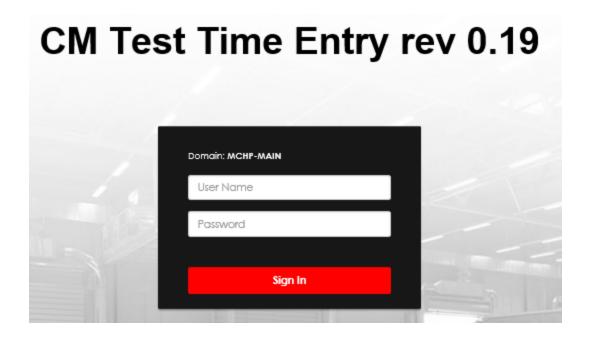
#### MES Control Yield Maintenance

REMOTE: mph-sv-fwrem





- Test Time Maintenance
  - http://mth-vm-mtft1:8081/Default.aspx/





## **Specs Review**

#### New Product Introduction (NPI)

KRA	Area	Related Specs	Gap analysis / Update	Owner	Implementation
New Product Introduction	Final Test	SPI-41036; New Product Development Review / Quality Planning SPI-41036: New Product Development Review / Quality Planning FRM-41043-001: Test Program Verification and Peer Review Checklist FRM-41036-001 New Product Review @ DOS FRM-41036-002 New Product Review @ Stream-out FRM-41036-102 Released Product Revision Review @ Stream-out FRM-41036-104 Unreleased Product Revision Review @ Stream-out FRM-41036-103 New Product Review @ RTP FRM-41036-116 RTP for Mask Options Released after the Primary Product RTP FRM-41036-036 PIC Whole Product Review FRM-41036-120 Fab Transfer Product (No Design Change) Revision Review @ RTP	PQPR-GN-005 FINAL TEST QUALIFICATION PROCEDURE REV_M (004) FT - New Product Introduction FT - Product Transfer from Qualified Site to MPHIL FT - New Tester Qualification FT - New Handler FT - New Conversion Kit FT - New CUH_Adaptor_board_Loadboard CN_FRM025068	Benson	CN_FRM025068 on route Target: WW39
	Wafer Test	FRM-41036-003; New Product Review @ RTP FRM-41036-103; Product Revision Review @ RTP for Revision Parts FRM-41036-043; Summary of Probe Readiness	Update MTHAI spec Update MTHAI spec Update MTHAI spec	Vilma Vilma Vilma	WW40 WW40 WW40
	Hardware & Software	SPI-41043; Test Specification System SPI-41043-004; Test Program Release Criteria/Procedures SPI-50065; Test Systems Group Department Operations Guide	Follow MTHAI spec  1. Following this Spec on the new CN process.  2. PI-3505; Test program and Manufacturing Software Qualification Procedure for Wafer Probe  SPI-35006; MPHIL New Test Hardware Release Procedure  PI-35023; Hardware Cage	Luther Luther Ed Alma	WW39 Implemented Implemented Implemented



## **Specs Review**

#### • New Equipment Purchase and Qualification

KRA	Area	Related Specs	Owner	Implementation	
New Equipment Purchase and Qualification	Handler (Singulated)	PI-76023; New Equipment Qualification Process - NY	Schedule of presentation on WW32	Rolly	
	Handler (Strip Test), Laser Marker and Saw Prober	PI-91222; TTS 1000 and TSK A-PM-90A Qualification Instruction	start coordination with the spec owner for their agreement in spec alignment with MPhil.  WW31  1. Done presentation and review	Gospel	Implemented WW35
	Testers: a. LTX b. D10/D20/D1x/D2X c. SPEA d. V93K	ES-91061; Acceptance Requirements for LTXC D10 IMA Tester	with MPhil.  c. SPEA – continue follow-up with the project owner (Wachara and Songpon);  seek help for the follow-up from MThai Purchasing	a. Allan C b.Laurence/ Fred c. Patrick d. Patrick/Paul	WW33
	Scan / TNR Oven (Burn-in / Bake)	ES-91048; Procurement Specification for Fully Automatic Mark&Lead Vision Inspection System	WW29-30  1. Done presentation and review  2. On-going specs generation/alingment with MTHAI	Ferdie	WW36
	Material	PI-93001; Direct Material Qualification	On-going review	Benson/Vilma	WW40



### **MPC Enrollment**

### **MPHIL:** Project Jeepney

- 1,867 MPC Enrollment: 100% June
- MAS OI installation: 100% July
- Set-up File (TSO): 100% July

### **SUBCON:** Project KTX

- 8,109 MPC Enrollment: 42%
- HW Readiness: 92%
- MPC Closed: 36%
- Target Completion: 19WW52



# **Project KTX**

BU	Total MPC to Enroll	MPC Target Enrollment per WW	Enrolled MPC moved for TSE Validation	% Enrollment Completion	For Enrollment	MPC with HW Ready	% HW Readiness	MPC Closed / Validated	% Closed / Validated
AMPD, SCBU, CPLS, MSLD	2363	72	928	39%	1435	2097	89%	658	28%
MCU8	2605	67	1258	48%	1347	2538	97%	1198	46%
MCU32	1618	51	603	37%	1015	1554	96%	460	28%
HMID	867	32	231	27%	636	817	94%	231	27%
WSG	348	10	157	45%	191	215	62%	149	43%
MPU32	261	3	249	95%	52	251	96%	246	94%
RF	10	0	9	90%	1	9	90%	9	90%
Analog	3	0	0	0%	3	0	0%	0	0%
AERO/CSFDY	34	2	0	0%	34	1	3%	0	0%
Total	8109	236	3435	42%	4714	7482	92%	2951	36%



# **Team Flyers (TPE)**

### Major Accomplishment

- > Completed 1,867 MPC integration in MPHIL
- > 95% integrated in terms of Reporting, Tools and Methods with MTHAI-TPE

### Heads-up

> N/A



# **Team Flyers (TPE)**

### Plan / Next Step

- Support the release of subcon MPC's on Project KTX
- PPO- Email feature alignment for MPHIL stakeholders
- > Yield data enhancement
- Full integration of SVN
- Specs Update
- Continuous alignment with MTHAI-TPE