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Fujitsu AIS Training Seminar

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MITAC

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Case Study

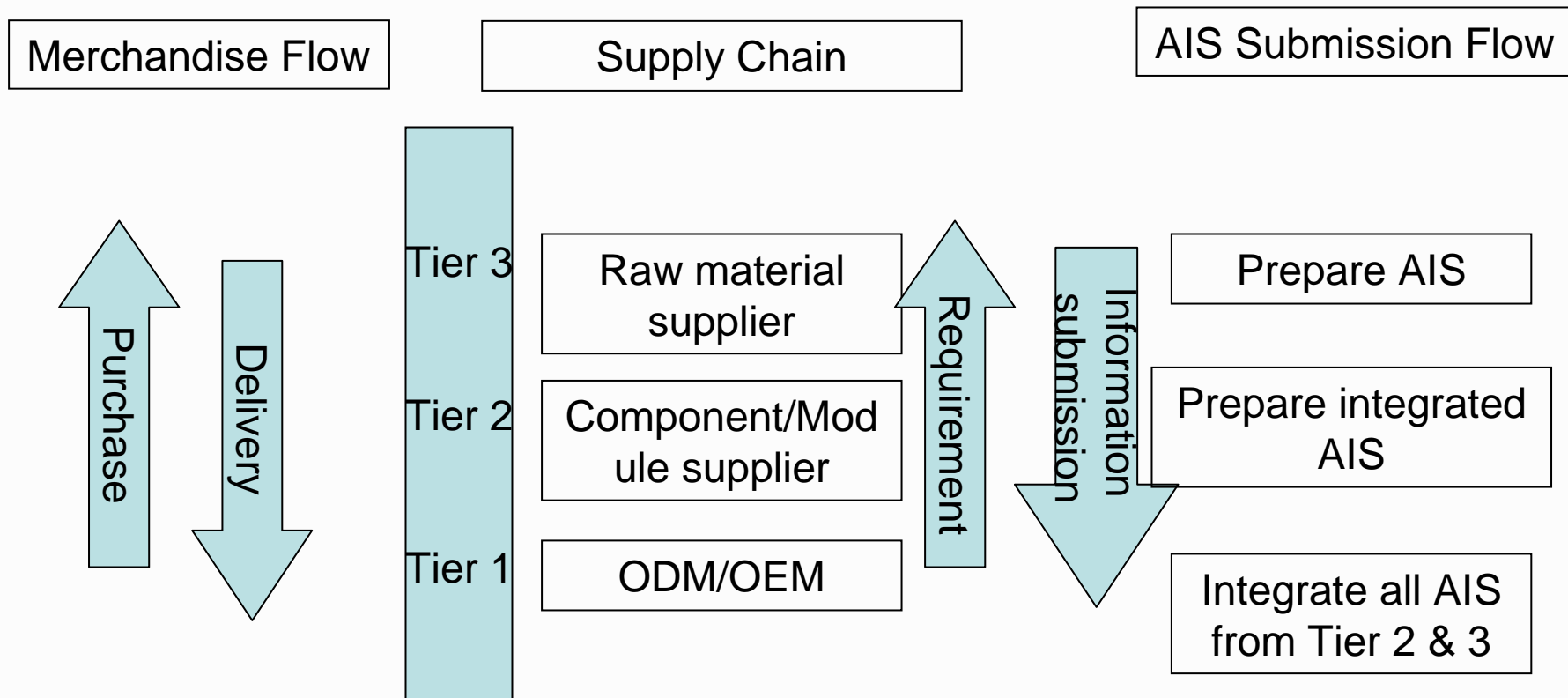
Objective

- Fujitsu (FJ) adopt JAMP's (**J**oint **A**rticle **M**anagement **P**romotion-**C**onsortium) AIS (**A**rticle **I**nformation **S**heet) as a GP survey mechanism and tools for communicating information of chemical substances from upstream to downstream companies. Downstream company has a responsibility to integrate AIS from upstream to midstream companies.
- To behalf of a downstream company, MiTAC have to assist customer to collect all AIS information from supply chain. Hence, With holding on AIS training seminar and conducting suppliers how to make AIS, they can easy to make a good quality documentation so that MiTAC can meet with FJ's requirements.

Outline of AIS Communication

- Principle of AIS communication in supply chain: Raw material suppliers (upstream, Tier 3)→Module suppliers (midstream, Tier 2)→ODM/OEM (downstream, Tier 1) ◦
 - Upstream suppliers shall honestly reveal these chemical substances which are added in substances and preparations and fill in MSDSplus, then submit to midstream suppliers. (MSDS shall also required)
 - Depended on MSDSplus and MSDS provided by upstream suppliers, midstream suppliers shall make up AIS, then submit to a downstream supplier.
 - ODM/OEM collect AIS/MSDS from upstream & midstream suppliers, and integrate them.
 - FJ request all supply chain to provide AIS or integrated AIS.

Flowchart: How Supply Chain to submit AIS



Tier 1: ODM/OEM ex. MiTAC

Tier 2: Module Supplier ex. PCBA manufacturer

Tier 3: Raw material supplier ex. Samsung (plastic manufacturer: ABS, PE, PC...etc)

Management of Updated AIS Information

- Once the AIS is updated, please inform MiTAC sourcers, and submit the updated AIS to CE.

Example:

- Content of substance or material information is wrong or updated
- Upstream supplier changed the AIS information
- New banned/restricted/reportable substance is required in AIS (ex. SVHC)
- Material, shape, processing, or Method is changed

How to Denominate AIS File

- AISA_Issued Date_MiTAC P/N_Vender Name_Vender P/N.xml
- AISA - AIS for single part
- AISB – AIS for integrated parts
- Issued Date: ex. 20121010
- MiTAC P/N: ex. 284500000336
- Vender Name: ex. TI
- Vender P/N: ex. PCA9306DCTR
- If vendors adopt the application of “the same series of components”, vendors can submit one AIS to represent the same series of components. (Appendix 1)

References for AIS (1)

■ JAMP AIS

- JAMP website: <http://www.jamp-info.com/english/ais>
- Materials: AIS_Ver-4_00-external-list-120625_E_2-2.zip /Substance List Ver. 3.010

■ Fujitsu's website:

http://procurement.fujitsu.com/jp/chemical_substance_e.html

- Materials:“Manuals” for making AIS
- “Check tool” for your AIS (Access key: V1L00)

■ Suppliers can download these information from above hyperlinks and unzip files by yourselves.

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References for AIS (2)

MiTAC's suppliers can download related AIS materials and information from this website: <http://escm.mic.com.tw/escm7>

e ffective S upply C hain M anagement

登入

帳號

密碼

供應商帳號請使用Email登入
內部員工帳號請使用Mitac AD帳號登入

[帳號申請](#) [忘記密碼](#)

系統公告

- 為維護您帳號資料的使用安全，系統將要求您每90天更改登入密碼!
- 2012 MiTAC AIS供應商訓練教材及AIS檔案
- 1. [MiTAC AIS training seminar](#)
- 2. [JAMP AIS Tool \(AIS_input_support_V40.xls\)](#)
- 3. [Fujitsu AIS Check Tool \(fjaeptv201_c.xls\)*Access key:V1L00](#)

Case Study

- Refer to Fujitsu case study
 - Exercise: How to make AIS
- References
 - Fujitsu : Manual for making AIS (Ver.4.0) [v1.01]
 - JAMP : JAMP AIS Input Support Tool Ver.4.0.
Operation Manual; JAMP AIS Preparation Procedure
- Tools
 - JAMP AIS Tool (AIS_input_support_V40.xls)
 - JAMP External List
(JAMP_MSDSplus_AIS_EXLIST_120625)
 - Fujitsu AIS Check Tool (fjaeptv201_c.xls)



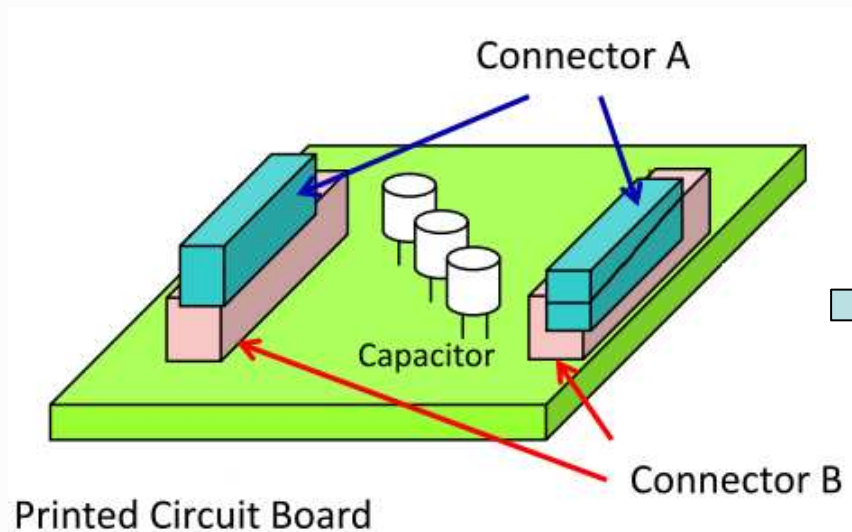
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Exercise:

How to make AIS

Making AIS of PCBA (Example)



Part level: PCBA

Component 1: Connector

Material 1

Substance 1a

Substance 1b

Material 2

Substance 2a

Substance 2b

Component 2: Capacitor

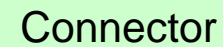
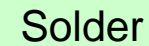
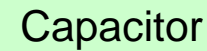
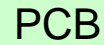
Material 3

Substance 3a

Substance 3b

Integrated AIS

Exercise 2



Component AIS

Exercise 1

Bill of Materials		Calculation		Unit of Measure		Terminology (BOM)		Source (ERP)	
Item		Parent		Material					
Level		Component		Material					
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Item									

Exercise 1 : Fulfill AIS of Connector

Sheet 1: General Information

1. AIS information

- Fill in the issue date and revise date if needed

2. Issuing company Info.

- Fill in the company name, issue section, address, and phone number

3. Article Information

- Fill in the manufacturer name, part name, and model number.

4. Composition Info.

- Fill in the article mass, unit of mass

*** Marked column is required field**

1. AIS Information		
Format Version		Ver.4.0
List	Material List	2.00
	Substance List	3.000
GP(Global Portal) Sheet ID		9999999999999999
Sheet Reference Number		
Original	Issued Date *	2009-07-01
Revision	Latest Issued Date	2010-04-22
	Revision History *	3

2. Issuing company Information		
Company Name	Alphanumeric *	JAMP Inc.
	Mother Language	
Company ID	ID Organizer	
	Entity ID	
Issuing Department	Department Name *	Environment Unit
	Address *	Showa 1-1, Heisei, Tokyo, Japan
	Telephone Number *	81-3-0003-0003
	FAX Number	
Department in Charge of Preparing AIS	Email Address	
	Department Name	
	Telephone Number	
Remarks		

3. Article Information		
Manufacturer Name *		JAMP Inc.
Common Product Name *		connectorA
Issuing Company Item Number	Alphanumeric *	connectorA6789
	Mother Language	
Multiple Product Name/Product Series Name		
Remarks		

4. Composition Information		
Article	Unit type *	piece
	Mass *	10.8
	Unit of Mass *	g
Declaration Concerning Composition Information *		1.This article is confirmed to contain declarable substances within the scope of Concerned Regulation or Other Documents Indicated by JAMP.
Total Amounts of Material		Calculation
GADSL		1.covers GADSL scope
JIG		1.covers JIG scope

Exercise 1 : Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Structure of Connector

Components	Quantity
Terminal	15
Shell	1
Insulated terminal	1
Junction shell	1
Screw	2

Check out the material data

Component

Material

FJ concerned Substance

Shell

Steels/
cast steel

Lead

Nickel
plating

Nickel

4. Composition Information

All Clear

Calculation

Delete selected row

Update Substance Info

Error Check

Temporarily SAVE

Export XML

Level		Component		Material					Substance				
Add		Add		Select	Add				Select	Add			
Name	Quantity	Name	Quantity	Use	Classification Number	Name	Mass	Unit	CAS Number	Substance Name	Concentration	Mass	Unit
		*	*	*	*		*	*					
		Shell	1.0	base material	R101	Steels/cast steel/sintered steel	4.0 g		7439-92-1	Lead	0.3%	0.012 g	
				plating	S002	Nickel plating	0.3 g		7440-02-0	Nickel	100.0%	0.3 g	

General Information

Composition List

➤ Fill in the content, based on the material data

Exercise 1 : Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Step 1: Input Component Name & Quantity

Component		Material	
Add		Select Add	
Name *	Quantity *	Use *	Classification Number *
Shell	1.0		

Component Name

Quantity

Step 2: Select "Material" as a usage from the menu

Select Use & MATERIAL

Select Material Use Then Select Material

Material Use

- 1.base material
- 2.clad
- 3.attached agent
- 4.inner preparations
- 5.solder joint
- 6.plating
- 7.chemical conversion treatme

Material

- R111 highly alloyed steel
- R112 Highly alloyed cast iron
- R101 Steels/cast steel/sintered steel
- R102 unalloyed, low alloyed steel
- R103 Cast iron
- R104 Cast iron with lamellar graphite / tempered cast iron
- R105 Cast iron with nodular graphite / vermicular cast iron
- R211 Cast aluminium alloys
- R212 Wrought aluminium alloys
- R221 Cast magnesium alloys
- R222 Wrought magnesium alloys
- R311 Copper (e.g. copper amounts in cable harnesses)
- R312 Copper alloys
- R330 Zinc and Zinc alloys
- R340 Nickel and Nickel alloys

Material Use

1.base material

Classification

R101

Material Name

Steels/cast steel/sintered steel

SELECT CANCEL

Material			
Select Add			
Use *	Classification Number *	Name	Mass *
1.base material	R101	Steels/cast steel/sintered steel	

Mass

Exercise 1 : Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Step 3: Click the "SELECT" button to choice substance & exemption if the substance is required to declare

3

CAS Number	Substance Name
7439-92-1	Lead

3-1

3-2

3-1: Input Name, CAS or Name, then click it

3-2: Click the "SELECT" button

Example: Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Step 4: Select the exemption If it is a declared RoHS substance

Concerned Regulation or Other Documents Indicated by JAMP													
SVHC		CLP Annex VI CMR 1,2		ESIS PBT		REACH Annex XVII		POPs Annex I		ELV		RoHS	
Applicable	Remarks	Applicable	Remarks	Applicable	Remarks	Applicable	Substance Use	Applicable	Substance Use	Applicable	Exempted Application	Applicable	Exempted Application
												1	6(a)

Select RoHS Exemption

RoHS Please select the appropriate option for exemption. If there is no exemption for that case, click "No exemption". If the concentration is below the threshold, click "Below threshold".

Selection Condition
☒ Select from the List ☐ No Exemption ☐ Below threshold

Filter Exemptions
☒ All Category ☐ Category 8,9 (medical devices and monitoring and control instruments)
☒ All ☐ Mercury ☐ Cadmium ☐ Lead ☐ Chromium(VI) ☐ PBB ☐ PBDE
☒ Valid ☐ Invalid

Search

- 4(e) Mercury in metal halide lamps (MH)
- 4(f) Mercury in other discharge lamps for special purposes not specifically mentioned in th
- 5(a) Lead in glass of cathode ray tubes
- 5(b) Lead in glass of fluorescent tubes not exceeding 0,2 % by weight
- 6(a) Lead as an alloying element in steel for machining purposes and in galvanized steel**
- 6(b) Lead as an alloying element in aluminium containing up to 0,4 % lead by weight
- 6(c) Copper alloy containing up to 4 % lead by weight
- 7(a) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 %
- 7(b) Lead in solders for servers, storage and storage array systems, network infrastructure
- 7(c)-I Electrical and electronic components containing lead in a glass or ceramic other than
- 7(c)-II Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or t

Code ☐ Mercury ☐ Chromium(VI)
Valid From ☐ Cadmium ☐ PBB
Valid To ☒ Lead ☐ PBDE

Exercise 1 : Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Step 5: Fill in Concentration (wt%).

Substance						
<div>Select</div> <div>Add</div>						
CAS Number	Substance Name	Concentration	Mass	Unit		
7439-92-1	Lead	0.3%	0.012	g		

Step 6: Click “Add” button and repeat step 3~5 to add other concerned substances accordingly.

Substance						
<div>Select</div> <div>Add</div>						
CAS Number	Substance Name	Concentration	Mass	Unit	Remarks	Ap a
7439-92-1	Lead	0.3%	0.012	g		

Exercise 1 : Fulfill AIS of Connector (component level)

Sheet 2: Composition list

Step 7: Click “ Error Check” to check if any error message pop up

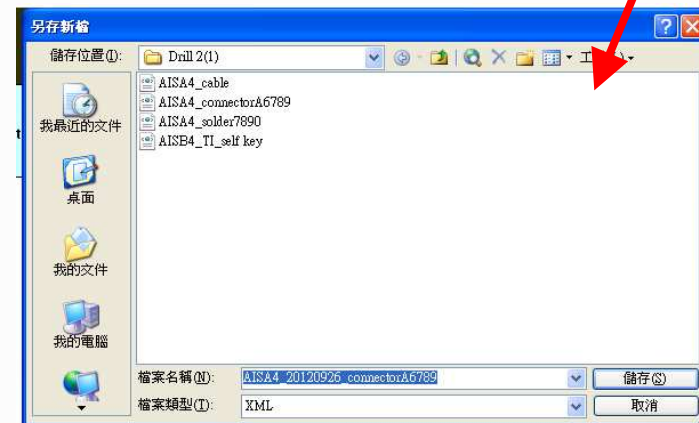
4. Composition Information

Buttons: All Clear, Calculation, Delete selected row, Update Substance Info, **Error Check** (7), Temporally SAVE, **Export XML** (8)

Level		Component		Material		Classification Number	Name	Mass
Add		Add		Select	Add			
Name	Quantity	Name *		Use *				
		Terminal		e material		R312	Copper alloys	
				ng		S005	Tin plating	
				4 material		R104	Steels/cast	

Microsoft Excel No Error Found. 確定

Step 8: If no error message pop up, Click “ Export XML” to save it



Exercise 2 : Integrated AIS (part level)

Step 1: Click “ Edit AIS”

JAMP AIS Input Support Tool Ver.4.0

This tool provides functions such as filling, editing, viewing, and integrating to support you AIS operation.

[Edit AIS] mode provides functions to create original AIS and edit AIS already exist.

[Integrate AIS] mode provides function to integrate an AIS from multiple AIS.

Click [Edit AIS] button to enter AIS Edit mode, or click [Integrate AIS] button to enter Integrate AIS mode.

1

Edit AIS

Integrate AIS

AIS Integration

Switch Display

- ☒ Show 1. AIS Information
- ☐ Show 2. Issuing company Information
- ☐ Show 3. Article Information

- ☐ Show 4. Composition Information
- ☐ Show 5. Other Information
- ☐ Show Requester Information
- ☐ Show Requester Item Numbers etc

2

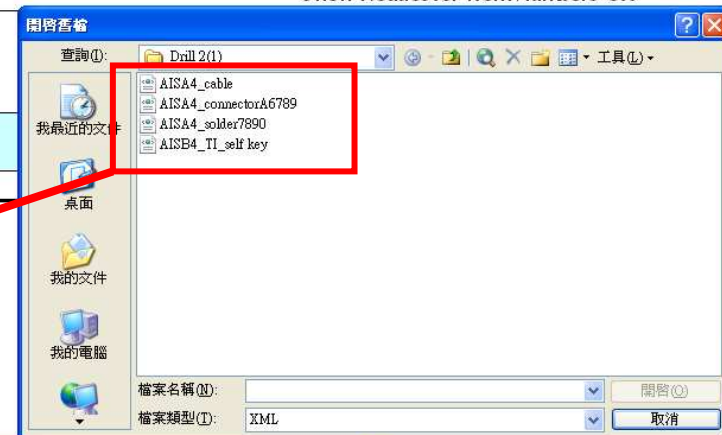
Add

Delete

Integrate

File Name

Step 2: Click “ Add” to
select the **component AIS**



Exercise 2 : Integrated AIS (part level)

Step 3: Fill in the number of unit and click “ Integrate” to get a integrated result

☐ Show Requester company Information
☐ Show Requester Item Information
☐ Show Requester Information
☐ Show Requester Item Numbers etc

File Name	Used Amount	Unit type	Number of Unit	Format Version	List Version	
					Material	Sub
AISA4_connectorA6789.xml		piece	1.0	Ver.4.0	2.00	3.00
AISA4_solder7890.xml		piece	1.0	Ver.4.0	2.00	3.00

Result

Level		Component		Material				
Add		Add		Select Add				
Name	Quantity	Name	Quantity	Use	Classification Number	Name	Mass	Unit
connectorA	1.0	Terminal	15.0	1.base material	R312	Copper alloys	0.03	g
				6.plating	S005	Tin plating	0.6	mg
		Shell	1.0	1.base material	R101	Steels/cast steel/sintered steel	4.0	g
				6.plating	S002	Nickel plating	0.3	g
		Insulated terminal	1.0	1.base material	P529	Other thermoplastics	0.5	g
		Junction shell	1.0	1.base material	P517	A(B)S Poly(acrylonitrile (-butadiene)-styrene)	5.0	g
solder	1.0	Solder	1.0	1.base material	R101	Steels/cast steel/sintered steel	0.2	g
				6.plating	S006	Chromium plating	0.2	mg
				5.solder joint	R361	Lead-free solder	1.128	g

Hint
0.000
99999
n

Q&A MIC Counterpart (Taiwan)

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Appendix

Appendix 1: How to Prepare a Same Series List

Preparing principal

- Provide a same series list with Excel format, then submit it with AIS to MiTAC
- Example: Maker name (ABC) have 3 same series parts. These 3 parts are pulsed; then divided by 3. The average is 0.14g.

Example:

Maker Name	Maker PN	Part Weight
ABC	CC0402KRX5R6BB224	0.14 g
	CC0402KRX5R8BB104	0.13 g
	CC0402KRX7R7BB104	0.15 g
Average		0.14 g

Thanks!
for Q&A

MiTAC

MiTAC

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