Receivables and Revenue Recognition

15.511 Corporate Accounting

Summer 2004

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June 22, 2004

See Intel Corporation’s consolidated balance sheets: December 25, 1999 and December 26, 1998, available at http://www.intel.com (last accessed July 9, 2004).

ALLOWANCE FOR RETURNS

- If customer has the right to return the product, the seller must estimate the dollar value of returns.
- Revenue is reported net of the amount expected to be returned.
- Typically, seller sets up a contra-asset account, ***Allowance for Returns***:
  - Analogous to Allowance for Doubtful Accounts
  - When return actually occurs, reduce both Allowance and face value of Accounts Receivable (or Cash) by the invoice amount.
  - Return has no effect on Net Income, nor on Net Assets, just as Write-off of Uncollectible has no effect on these amounts.
  - BSE: AR - Allowance for Returns = RE
- Intel takes a slightly different approach: ***Deferred Income Liability***.

A Quick Look at Intel's Statements

- Revenue recognition.
  - The company generally recognizes net revenues upon the transfer of title. However, certain of the company's sales are made to distributors under agreements allowing price protection and/or right of return on merchandise unsold by the distributors. Because of frequent sales price reductions and rapid technological obsolescence in the industry, Intel defers recognition of revenues on shipments to distributors until the merchandise is sold by the distributors.

Interpreting Intel's Revenue Footnote

- The company generally recognizes net revenues upon the transfer of title.
  - means that when products ship to customers, Intel recognizes net sales revenue (net of allowances for bad debts).

- However, certain of the company's sales are made to distributors under agreements allowing price protection and/or right of return on merchandise unsold by the distributors.
  - means that some products are sold to distributors who will resell them. Intel provides a safety net to distributors: returns and price protection.

- Because of frequent sales price reductions and rapid technological obsolescence in the industry, Intel defers recognition of revenues on shipments to distributors until the merchandise is sold by the distributors
  - means that instead of recognizing sales revenue and related COGS when these products ship to distributors, Intel waits for the price/return uncertainty is resolved -- giving rise to a Deferred Income Liability.

DEFERRED INCOME: AN EXAMPLE

Shipments on 3/1 to OEMs and Distributors:

Total Billings	**$ 350,000**	
Direct to OEMs		**280,000**
To Distributors (PP)		**70,000**
COGS	**$ 90,000**	
Direct to OEMs		**72,000**
To Distributors (PP)		**18,000**

- Return / Price Protection expires for $35K of sales on 3/31
- Invoice Price is reduced from $35K to $25K on the remainder of shipment on 4/15

DEFERRED INCOME: AN EXAMPLE

	AR + INV	Deferred Income + RE
OEM sales		
Distrib. Sales		
PP Expires For $35K		
PP Applies For 35K		

DEFERRED INCOME: AN EXAMPLE

	AR +	INV	Deferred Income +	RE
OEM sales	280	(72)		280 rev. (72) exp.
Distrib. Sales				
PP Expires For $35K				
PP Applies For 35K				

Dr AR	280	
Cr Revenue – OEM		280
Dr COGS – OEM	72	
Cr Inventory		72

DEFERRED INCOME: AN EXAMPLE

	AR	+	INV	Deferred Income	+	RE
OEM sales	280		(72)			280 rev. (72) exp.
Distrib. Sales	70		(18)	70 (18)		
PP Expires For $35K						
PP Applies For 35K						

Dr AR	70	
Cr Def Inc– Distr		70
Dr Def Inc – COGS to Distr	18	
Cr Inventory		18

Deferred Income Liability

COGS to distributors =18	Sales to distributors = 70

Accounts receivables

70	

Inventory

	18

DEFERRED INCOME: Confirmed sales

	AR	+	INV	Deferred Income	+	RE
OEM sales	280		(72)			280 rev. (72) exp.
Distrib. Sales	70		(18)	70 (18)		
PP Expires For $35K				(35) 9		35 rev. (9) exp.
PP Applies For 35K						

Dr Def Inc 35
Cr Revenue – Distr 35

Dr COGS – Distr 9
Cr Def Inc – COGS to Distr 9

Deferred Income Liability

COGS to distributors =18	Sales to distributors = 70
Confirmed Sales = 35	COGS corresponding to confirmed sales = 9

COGS

9	

Revenues

	35

DEFERRED INCOME: Price reductions

	AR	+	INV	Deferred Income	+	RE
OEM sales	280					280 rev.
			(72)			(72) exp.
Distrib. Sales	70			70		
			(18)	(18)		
PP Expires For $35K				(35)		35 rev.
				9		(9) exp.
	(10)			(10)		
PP Applies For 35K						

Dr Deferred income 10

Cr AR 10

Deferred Income Liability

COGS to distributors =18	Sales to distributors = 70
Confirmed Sales = 35	COGS corresponding to confirmed sales = 9
Price reductions = 10	

Accounts receivables

70	10

DEFERRED INCOME: Confirmed sales (2nd lot)

	AR	+	INV	Deferred Income	+	RE
OEM sales	280		(72)			280 rev. (72) exp.
Distrib. Sales	70		(18)	70 (18)		
PP Expires For $35K	(10)			(35) 9 (10)		35 rev. (9) exp.
PP Applies For 35K	Remaining PP expires			(25) 9		25rev. (9) exp.

Dr Def Inc	25	
Cr Revenue – Distr		25
Dr COGS – Distr	9	
Cr Def Inc – COGS to Distr		9

Deferred Income Liability

COGS to distributors =18	Sales to distributors = 70
Confirmed Sales = 35	COGS corresponding to confirmed sales = 9
Price reductions = 10	COGS corresponding to second lot = 9
Confirmed Sales (2nd lot) = 25	
88	88

COGS

9	
9	
18	

Revenues

	35
	25
	60

Distributors pay up

Cash

35+25 = 60	

Accounts receivables

70	10
	60
0	

Recognizing Revenue: Is additional service required?

- Example of Warranty Coverage: Seller promises to repair or replace defective products for a specified period of time
- Sales transaction commits seller to incur uncertain, but predictable, future costs: must be matched to sales revenues
- Example:
  - On 7/1, MicroSystems sells 30 laptops for $2,000 each on account.
  - Warranty period of 1 year, parts and labor, applies to each unit.
  - Past experience indicates that warranty costs will average $40/unit and that 5% of credit sales will not be collected.
  - As of December 31, actual warranty costs incurred are $700. $50K has been collected from the customers, and one account of $2,000 has been written off.

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale					
Accrue warranty exp.					
Accrue bad debts					
Collect cash					
Incur warranty costs					
Write-off uncoll. A/R					

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.					
Accrue bad debts					
Collect cash					
Incur warranty costs					
Write-off uncoll. A/R					

Dr Accounts Receivables 60,000

Cr Revenues 60,000

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.				1,200	–1,200
Accrue bad debts					
Collect cash					
Incur warranty costs					
Write-off uncoll. A/R					

Dr Warranty Expense	1,200	
Cr Accrued Warranty Liability		1,200

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.				1,200	–1,200
Accrue bad debts			–3,000		–3,000
Collect cash					
Incur warranty costs					
Write-off uncoll. A/R					

Dr Bad debt expense 3,000
Cr ADA 3,000

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.				1,200	–1,200
Accrue bad debts			–3,000		–3,000
Collect cash	+50,000	–50,000			
Incur warranty costs					
Write-off uncoll. A/R					

Dr Cash 50,000
Cr Accounts receivables 50,000

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.				1,200	–1,200
Accrue bad debts			–3,000		–3,000
Collect cash	+50,000	–50,000			
Incur warranty costs	–700			– 700	
Write-off uncoll. A/R					

Dr Accrued warranty Liability 700
Cr Cash 700

Accounting for Warranty Expense (with a refresher on Bad Debt expense...)

	Cash	+ A/R	– ADA	Accrued Warranty Liability	+ Ret. Earn.
7/1 Sale		60,000			60,000
Accrue warranty exp.				1,200	–1,200
Accrue bad debts			–3,000		–3,000
Collect cash	+50,000	–50,000			
Incur warranty costs	–700			–700	
Write-off uncoll. A/R		–2,000	+2,000		

Dr ADA 2,000
Cr Accounts receivables 2,000