

Case Study: #1

Customer X is a Microchip Microcontroller (MCU) user. In addition, the customer's R&D team has experience with microchip development tools and ecosystems. Microchip MCU's competitor quoted US\$1.00, and the current Microchip MCU price was US\$3.00. Microchip revised the quote to US\$1.90 on a new MCU (Pin-to-pin compatible, roadmap device) as the best price. You need to propose to win the project. Let your proposal briefly explain the delivered value.

You can make use of the additional information below for Case Study #1:
Assume pre-production cost is part of development (additional R&D spending) or manufacturing (no additional R&D spending). It does not matter, be consistent.

Important facts	Customer X must update the system every three years to remain competitive
	The customer X invests US\$10K/month R&D expense on every project
	The customer has three project classifications. Small - US\$30K spend, Medium - US\$50K spend, Large - US\$100K spend
	Pre-production testing times to reduce manufacturing risk. Small - 1 month, Medium - 2 months, Large - 3 months
Project details	Shipments - 20,000/month
	Current Bill-of-Materials (BOM) cost - US\$30.00
	Microchip MCU current price - \$3.00 Competitor price - \$1.00 Best possible Microchip MCU for redesign price - \$1.90
	The current software will be re-used, plus some minor feature additions. When Microchip MCU is used - the project scale is "small", and technical risk is low. When Competitor MCU is used - the project scale is "large" and requires a complete software rewrite, and technical risk is high
	Additional US\$2.25 of cost savings in other components
	New BOM cost = Old BOM cost - Old MCU cost - additional savings + New MCU cost