

## COCOMO RESULTS for Banking Software for Embedded Systems

MODE	"A" variable	"B" variable	"C" variable	"D" variable	KLOC	EFFORT, (in person-months)	DURATION, (in months)	STAFFING, (recommended)
embedded	0.9271579363191496	1.2	2.5	0.32	400.000	1229.209	24.357	50.467

Explanation: The coefficients are set according to the project mode selected on the previous page, (as per Boehm). Note: the decimal separator is a period.

The final estimates are determined in the following manner:

**effort** =  $a * KLOC^b$ , in person-months, with KLOC = lines of code, (in thousands), and:

**staffing** = effort/duration

where a has been adjusted by the factors:

**Product Attributes**

Required Reliability	1.15 (H )
Database Size	0.94 (L )
Product Complexity	1.00 (N )

**Computer Attributes**

Execution Time Constraint	1.00 (L )
Main Storage Constraint	1.00 (VL)
Platform Volatility	0.87 (VL)
Computer Turnaround Time	0.87 (L )

**Personnel Attributes**

Analyst Capability	0.71 (VH)
Applications Experience	0.91 (H )
Programmer Capability	0.70 (VH)
Platform Experience	0.90 (H )
Programming Language and Tool Experience	0.95 (VH)

**Project Attributes**

Modern Programming Practices	0.82 (VH)
Use of Software Tools	0.83 (VH)
Required Development Schedule	1.04 (H )

**New (Values are probably wrong)**

Required reusability	1.15 (XH)
Documentation match to life-cycle needs	1.00 (L )
Personnel continuity	1.00 (VH)
Multisite development	1.00 (VL)

For further reading, see Boehm, "Software Engineering Economics"

**WARNING:** If you see "NaN" or "undefined" in any field above, you have entered an **INVALID** value for KLOC or Mode! Hit the "BACK" button on your browser, hit the "RESET" button if you entered data previously, enter a **DECIMAL NUMBER** in the KLOC input text box and click on the appropriate mode!

**The project should save the results of this COCOMO calculation if needed to support its make or buy decision.**

Please send notice of any problems to: [grc-dl-strs-repository-manager@mail.nasa.gov](mailto:grc-dl-strs-repository-manager@mail.nasa.gov)  
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SWL03\_1\_ApplicationName:Banking Software for Embedded Systems  
SWL03\_1\_ApplicationVersion:any  
SWL03\_1\_ApplicationNumber:STRS-SUB-  
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SWL25\_1\_ApplicationSLOC:400000  
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SWL25\_COCOMO\_b:1.2  
SWL25\_COCOMO\_c:2.5  
SWL25\_COCOMO\_d:0.32  
SWL25\_COCOMO\_e\_effort:1229.209 (person-months)  
SWL25\_2\_ApplicationLevelOfEffort:1229.209 (person-months)  
SWL25\_COCOMO\_t\_duration:24.357 (months)  
SWL25\_2\_ApplicationTime:24.357 (months)  
SWL25\_COCOMO\_eot\_staff:50.467 (recommended)  
SWL25\_COCOMO\_Required Reliability:1.15 (H )  
SWL25\_COCOMO\_Database Size:0.94 (L )  
SWL25\_COCOMO\_Product Complexity:1.00 (N )  
SWL25\_COCOMO\_Execution Time Constraint:1.00 (L )  
SWL25\_COCOMO\_Main Storage Constraint:1.00 (VL)  
SWL25\_COCOMO\_Platform Volatility:0.87 (VL)  
SWL25\_COCOMO\_Computer Turnaround Time:0.87 (L )  
SWL25\_COCOMO\_Analyst Capability:0.71 (VH)  
SWL25\_COCOMO\_Applications Experience:0.91 (H )  
SWL25\_COCOMO\_Programmer Capability:0.70 (VH)  
SWL25\_COCOMO\_Platform Experience:0.90 (H )  
SWL25\_COCOMO\_Programming Language and Tool Experience:0.95 (VH)  
SWL25\_COCOMO\_Modern Programming Practices:0.82 (VH)  
SWL25\_COCOMO\_Use of Software Tools:0.83 (VH)  
SWL25\_COCOMO\_Required Development Schedule:1.04 (H )  
SWL25\_COCOMO\_Required reusability:1.15 (XH)  
SWL25\_COCOMO\_Documentation match to life-cycle needs:1.00 (L )  
SWL25\_COCOMO\_Personnel continuity:1.00 (VH)  
SWL25\_COCOMO\_Multisite development:1.00 (VL)  
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