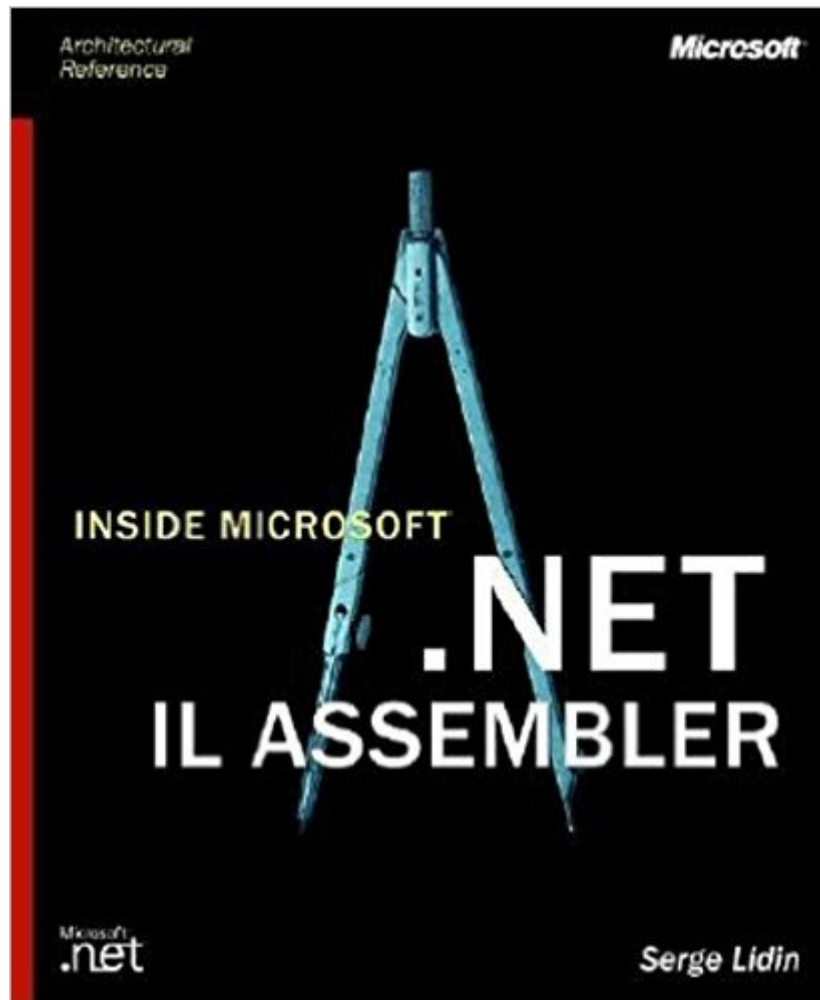The book was found

# Inside Microsoft .Net Il Assembler

# Synopsis

Get the inside scoop on this critical low-level language with an architectural guide from the most reliable authority--the language's designer, Serge Lidin. Readers discover common structures, functions, and rules for designing .NET applications, explanations for how .NET executables compile, details on the .NET IL Assembler, IL Disassembler and Metadata Validation tools, and more.

# Book Information

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# Customer Reviews

Inside Microsoft .NET IL Assembler is like a backstage pass to the language that ALL managed .NET code compiles down to and a great companion to any .NET developer who wants to better understand how their code is compiled and executed.Benefits of the book:For the 'average' .NET developer there are a number of things you can learn and apply to daily software development. For a start you will learn how to read the IL code from compiled C#, VB.NET or any other managed .NET assembly. This will give you more options in tuning performance (since you will understand the true IL impact of your code alternatives) or hunting down bugs, even if orignial source is unavailable.Learning the finer points of IL will allow you to use the Reflection.Emit namespace to dynamically create and load your own IL-based assemblies at run time, for extreme flexibility, performance or both.Knowing IL will also allow you to work with existing assemblies by disassembling then, modifying their code then re-assembling them (IL round-tripping). You can add functionality that is not available to C# or VB.NET (i.e. global methods and fields or unions within a

struct) or you can control minute details of unmanaged interop.Things I thought could be improved:Since the text is quite dense with information, there could be more context which would help with actual application. Sometimes the implications of what was being talked about weren't clear to me.There were few samples on the CD, although there were lots of snippets inline with the text.All in all, this is my favorite .NET book simply because, although you can be a great .NET programmer without knowing IL, you are definately better off if you do.

Although this text is a little older now, the fundamentals of .NET's IL haven't changed. In fact, it is a testament to MS that they originally implemented such a complete system.Understanding the IL system is not so easy, though. While excellent in their own right, texts like Richter's CLR via C# really don't do the job, especially when it comes to understanding metadata. The only way to understand IL and .NET is to understand IL and metadata.Since reading most of this book, I would say that just about every word I read elsewhere about C# or any .NET language is 25% easier to understand. Let's face it, when you know how an engine works it's easier to understand what a, say, turbo-charger does.Lidin writes well and avoids straying or getting too deep into CLR history or quirks, but he never sacrifices the process facts of how CLR does its job (in spite of almost promising he will in the introduction, then dramatically reversing himself...with intentional effect).This book is not for the beginner! But any coding pro should find it to be a pretty straightforward experience. Certainly it is easier reading than, say, Grimes' C++ Managed Extensions book.Understanding how it works is just such a great way to leverage time spent learning. It is time very well spent, and with this text the reader won't have any reason to doubt that at all.

From its table of contents, this book would seem to be an invaluable resource for vm architects or compiler writers. Unfortunately, the book is wrong in places and the online errata page isn't updated. Also, the explanations aren't as in depth as I would like. This book should be a companion or replacement to the ECMA CIL specification. Sadly, it's neither.

The book meets all my expectations on learning about the Microsoft Intermediate Language Assembler, its commands and how to use it effectively. I haven't made it all the way through the book yet, but, I can tell that the content does an excellent job of presenting the material in a fairly easy to understand way. Do understand though that this book is not a step by step book, but, a learning book that doubles as a reference. Programmers of all levels will benifit from the content and even if you're not going to program in IL assembler, you will gain a deeper understanding of what's

going on under the hood of the .NET Language you're using, and how it is translated before moving on to the machine specific code. It can also give you a better understanding of the assembler in case of the need to debug a program at this level, you will gain a much better understanding of what exactly is going on, and hopefully where it went wrong. What I have done so far has impressed me and left me with much more knowlege than I had before.

I was looking for a book which offered a more detailed view on .NET assemblies and interaction with the CLR: guidelines for packaging and deploying assemblies, how the CLR locates assemblies, etc.This book does provide that information, nonetheless, my mistake was not realizing that this is a book mainly about the *IL language* itself. I was not interested in looking into that much detail. The book also covers in great detail what exactly is stored in a .NET assembly. I also liked the discussion on interoperation of managed and unmanaged code.If you're looking for a book on IL, this is your book, otherwise it seems that the book 'Compiling for the .NET CLR' is a better book for what I was looking for.

Do you want look inside the Assembly ? Are you interested about the assembler of .NET ? This is a must for every .NET developer.

Then this IS the book you need. It gives an excellent introduction to how your high-level (VB.NET and C# etc..) code turns into the IL Code..!

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